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1996 Performance of Field Crop Varieties

University of Tennessee Agricultural Experiment Station

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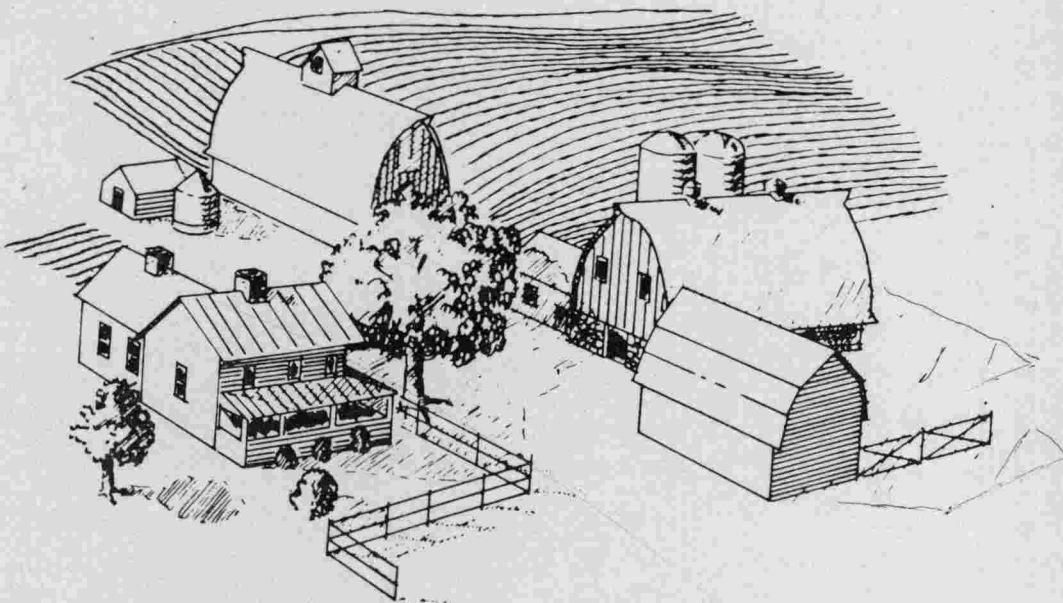
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The University of Tennessee
Agricultural Experiment Station
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**Bulletin 694
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The University of Tennessee
Agricultural Experiment Station
Knoxville, Tennessee
Don O. Richardson, Dean

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1996

PERFORMANCE OF FIELD CROP VARIETIES

DATA FOR 1996

WITH SUMMARIES OF RESULTS FROM PREVIOUS YEARS

CORN - GRAIN SORGHUM - RYE - OATS

BARLEY - WHEAT - SOYBEANS

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RECOMMENDED CROP VARIETIES

Listed Alphabetically

Corn Hybrids

See Table A.

Oats

Fall: Southern States 76-30.

Spring: Don, Larry, Ogle, and Otee.

Wheat

FFR 525, FFR 350¹, FFR 555, Freedom, Gore¹, Hickory, Northrup King Coker 9803, Madison, Mallard¹, Pioneer brand 2580, Pioneer brand 2684, Pioneer brand 2628, Northrup King 9543, Jackson, Sawyer¹, Verne, and Wakefield.

Barley

Anson and Wysor.

Alfalfa

Aggressor, Alfagraze, Apollo Supreme¹, Belmont, Cimarron VR, Chief, Garst 636, N.K. MultiKing 1, Legacy, and Pioneer 5432.

Red Clover

Cinnamon, Redland III, Redland II, Reddy, and Redman.

Grain Sorghum

Non-Bird Resistant: DeKalb DK 40y, Deltapine G-522A, Deltapine 1552, Deltapine G-522DR, HyPerformer Wings, HyPerformer Cherokee, HyPerformer 1225 DR, Pioneer brand 8212y^{1,2}, Pioneer brand 8446^{1,2} Topaz², and Northrup King KS 710.

Soybeans

See Table B.

Sorghum x Sudangrass crosses

DeKalb SX-17, FFR 202, Sordan 79, Tastemaker III.

Sudangrass

Trudan 8.

Pearlmillet

Millex 24, Millhy 99^{1,2}, and Tifleaf I^{1,2}.

Summer Annual recommendations are based on production when allowed to grow 20-40 inches before cutting or grazing.

¹Present plans indicate that this variety will not be recommended after 1997.

²These varieties were not submitted for testing in 1996.

Table A

The recommended corn hybrids for 1997 are as follows:

Make yield comparisons only within a given group because all maturity groups are not evaluated at the same location.

Color--Yellow Brand	Maturity----Early Hybrid	3 Yr. Avg. Yield	Grain Moisture at Harvest
		Bu/A	%
HyPerformer	HS 9773	183	15.7
HyPerformer	HY 9899 V	183	17.1
Beck	72 X	181	14.6
Pioneer	3245	180	14.3
Pioneer	3279	176	14.2
FFR	793	169	14.6
Northrup King	N 7590	166	14.3
Pioneer	3394	166	13.6
HyPerformer	HS 9843	165	14.3
	Not included in 1996 trials		
Northrup King	N 7707 ¹	---	---
Beck	7101 ¹	---	---
Color---White	Maturity-----Early		
Zimmerman	Z 62 W	180	14.6
	Not included in 1996 trials		
Pioneer	3281 W	---	---
Color----Yellow	Maturity--Medium-season 500 group ²		
Pioneer	3223	184	16.2
Pioneer	3245 (Check)	181	15.6
Pioneer	3163	180	16.0
Pioneer	3154	172	17.1
AgraTech	787	170	16.1
Pioneer	3156	169	16.7
Asgrow	RX 893	167	16.3
Zimmerman	Z 29	165	16.3
Gutwein	2810	161	15.8
Northrup King	N 8020	159	15.9
Beck	87 MDM	156	19.0
	Not included in 1996 trials		
Asgrow	RX 919 ¹	---	---
Deltapine	4682 ¹	---	---
Asgrow	RX 897 ¹	---	---
Gutwein	2680 ¹	---	---
Color---White	Maturity--Medium-season (500 group)		
Pioneer	3203 W	169	17.4

Table A Continued

Color---Yellow	Maturity-Medium-season (600 group)		
ICI/Garst	8220	186	18.1
DeKalb	DK 714	181	17.2
FFR	943	181	18.0
Terral	TR 1185	174	17.5
DeKalb	DK 683	167	16.2
FFR	793	166	16.1
Terral	TR 1167	164	15.8
Funk's	5516	161	15.8

Not included in 1996 trials			
Deltapine	8695 ¹	---	---
HyPerformer	HY 9919	---	---
DeKalb	DK 689 ¹	---	---
Mycogen	8240 ¹	---	---
Cargill	7997	---	---
Not included in 1995 trials			
Southern Cross	SC 612	---	---

Color---White	Maturity--Medium season (Group 600)		
Asgrow	RX 943 W	157	17.5
Not included in 1996 trials			
HyPerformer	HS 175 W ¹	---	---

Color---Yellow	Maturity---Full-season		
Crow's	702	183	17.6
DeKalb	DK 743	182	18.3
Cargill	8936	182	16.5
FFR	883 GLS	177	16.8
Asgrow	RX 983	175	17.5
Terral	TV 2930	173	17.6
Northrup King	N 8811	169	19.1
Ciba Funk's	G 4714	168	17.2
Cargill	8327	166	15.5
Not included in 1996 trials			
Pioneer	3165	---	---
Pioneer	3140	---	---
Northrup King	N 8727	---	---

Color--White	Maturity--Full-season		
Zimmerman	Z 64 W	175	16.7

¹Present plans indicate that this hybrid will not be recommended after 1997.

²For the medium-season hybrids, 500 and 600 refer to the entry numbers used in the two tests. Yields should be compared within each entry group only.

Table B

Recommended Soybean Varieties for 1997

<u>EARLY MATURITY GROUP IV</u>				<u>MEDIUM MATURITY GROUP V</u>			
Brand	Variety	Yield Bu/A	Maturity Date	Brand	Variety	Yield Bu/A	Maturity Date
<u>Not resistant to cyst nematode</u>				<u>Not resistant to cyst nematode</u>			
Deltapine	DP 3478	51	9-17	VA	Hutcheson	55	10-1
VA	Chesapeake	47	9-18	NC	Holladay	51	9-26
Deltapine	DP 3456	46	9-13	NC	Clifford	51	9-28
				FFR	553	51	9-29
HyPerformer	HY 498	--	-- ¹	HyPerformer	HY 574	50	10-4
Northrup King	S 48-84	--	-- ¹	Deltapine	105	--	-- ¹
				FFR	561	--	-- ¹
				Terra-Vig	5693	--	-- ¹
<u>Resistant to race 3</u>				<u>Resistant to race 3</u>			
PA	Manokin	51	9-24	Pioneer	9584	55	10-3
Delsoy	4900	--	-- ¹				
				Deltapine	415	52	9-30
<u>Resistant to races 3 and 14</u>				Northrup King S	57-11	51	10-1
Hartz	H 4994	49	9-23	Hartz	5218	50	9-30
Asgrow	A 4715	47	9-16	Deltapine	DP 3588	50	10-6
Northrup King	S 46-44	46	9-16	Northrup King S	52-25	49	9-25
TN	TN 4-94	44	9-21	Deltapine	DP 3589	--	-- ¹
TN	TN 4-86	43	9-15	Pioneer	9593	--	-- ¹
Delsoy	4710	--	----	<u>Resistant to races 3, 14</u>			
				Asgrow	A 5885	56	10-2
				Asgrow	A 5979	55	10-4
				Asgrow	A 5843	55	10-3
				FFR	563	51	10-3
				Asgrow	A 5403	51	9-28
				TN	TN 5-95	50	9-27
				FFR	542	49	9-29
				HyPerformer	HSC 591	--	-- ¹
				Pioneer	9551	--	-- ¹
				HyPerformer	HSC 501	--	-- ¹
				AgraTech	AT 555	--	-- ¹
				AgraTech	AT 550	--	-- ¹
				<u>Resistant to races 3, 5</u>			
				TN	TN 5-92	44	10-1

LATE MATURITY GROUP VINot resistant to cyst nematode

Deltapine	DP 3627	--	-- ¹
Pioneer	9641	--	-- ¹

Resistant to race 3

TN	TN 6-90	54	10-8
----	---------	----	------

Resistant to races 3 and 14

Northrup King	S 66-90	--	-- ¹
---------------	---------	----	-----------------

¹Present plans indicate that this variety will not be recommended after 1997.

SOYBEANS

Maturity Group IV

Asgrow A4715: Has white flowers, tawny pubescence, and seed with a black hila. Has resistance to races 3 and 14 soybean cyst nematode. Maturity Group IV.

Chesapeake: Has white flowers, gray pubescence, and tan podwall, seed coats are yellow with buff hila. Has no resistance to soybean cyst nematode. Maturity group IV.

Delsoy 4710: Has purple flowers, tawny pubescence and seed with a black hila. Resistant to races 3 and 14 soybean cyst nematode. Maturity Group IV.

Deltapine DP 3478: Has purple flowers, tawny pubescence and seed with black hila. Reported to have resistance to stem canker and SDS. Maturity group IV.

Deltapine DP 3456: Has white flowers, tawny pubescence, and seed with black hila. Maturity Group IV.

Delsoy 4900: Has purple flowers, tawny (brown) pubescence and seed with a brown hila. Resistant to race 3 soybean cyst nematode. Maturity Group IV.

Hartz H 4994: Has purple flowers, tawny (brown) pubescence and seed with a black hila. Reported to have resistance to race 3 and 14 soybean cyst nematode. Maturity Group IV.

HyPerformer Hy 498: Has white flowers, gray pubescence, and seed with a buff hila. Has no soybean cyst nematode resistance. Maturity Group IV.

Northrup King S 48-84: Has purple flowers, tawny pubescence, and seed with a brown hila. It is reported to have some tolerance to races 3 and 14 soybean cyst nematode. Ratings at Jackson have not supported this tolerance. Using a three-year average, the ratings for race 3 was 4.5 and race 4 was 4.4. It seems that it has some tolerance to race 5. The rating for the past year was 3.2 for race 5. Maturity Group IV.

Northrup King S 46-44: Has purple flowers, tawny pubescence and seed with black hila. Resistant to races 3 and 14 of soybean cyst nematode. Reported to have stem canker resistance. Maturity Group IV.

TN 4-86: Has purple flowers and tawny pubescence. Resistant to races 3 and 14 of the soybean cyst nematodes. Has good resistance to stem canker and high resistance to sudden death syndrome (SDS) and frog-eye. Maturity Group IV.

TN 4-94: Has purple flowers and gray pubescence. Resistant to race 3 and 14 of the soybean cyst nematodes. Has moderate resistance to frog-eye, SDS and stem canker. Maturity Group IV.

Manokin: Has white flowers, tawny pubescence and seed with black hila. Reported to have resistance to race 1 and 3 soybean cyst nematode, stem canker and frog-eye disease. Maturity Group IV.

Maturity Group V

Asgrow A5403: Has purple flowers, gray pubescence and seed with an imperfect black hila. Has resistance to Race 3 soybean cyst nematode and moderate resistance to race 14. Has shown moderate resistance to stem canker. Maturity Group V.

Asgrow A5843: Has white flowers, gray pubescence and seed with buff hila. Has resistance to races 3 and 14 soybean cyst nematode. Reported to have resistance to stem canker. Maturity Group V.

Asgrow A5885: Has white flowers, tawny pubescence and seed with a black hila. Resistant to races 3 and 14 soybean cyst nematodes. Reported to have resistance to frogeye leaf spot, SDS and moderate resistance to stem canker. Maturity Group V.

Asgrow A5979: Has white flowers, gray pubescence, and seed with buff hila. Has resistance to race 3 soybean cyst nematode and moderate resistance to race 14. Maturity Group V. Has shown moderate resistance to stem canker.

AgraTech AT 555: Has white flowers, gray pubescence and seed with a buff hila. Reported to have resistance to races 3 and 14 soybean cyst nematode. Reported to have moderate resistance to stem canker and Sudden Death Syndrome (SDS). Maturity Group V.

AgraTech AT 550: Has purple flowers, tawny pubescence, and seed with black hila. Has resistance to races 3 and 14 of soybean cyst nematode. It is rated moderately resistant to stem canker. Maturity Group V.

Clifford: Has purple flowers, tawny pubescence and seed with black hila. No resistance to cyst nematode. Maturity group V.

HyPerformer HSC 501: Has purple flowers, tawny pubescence seed with a black hila. Resistant to races 3 and 14 soybean cyst nematode. Maturity Group V.

Holladay: Has purple flowers, gray pubescence and seed with an imperfect black hila. Has no resistance to cyst nematode. Maturity group V.

Northrup King S52-25: Has white flowers, tawny pubescence and seed with a black hila. Resistant to race 3 and 14 soybean cyst nematode. Maturity group V.

Northrup King S57-11: Has purple flowers, tawny pubescence and seed with a black hila. Resistant to races 3 and 14 soybean cyst nematode.

Deltapine DP 3588: Has purple flowers, tawny pubescence and seed with black hila. Resistance to race 3 soybean cyst nematode. Reported to have resistance to stem canker and frogeye leaf spot.

Deltapine DP 3589: Has purple flowers, tawny pubescence, and seed with black hila. Has resistance to race 3 soybean cyst nematode. Reported to have resistance to stem canker, aerial blight and frogeye. Maturity Group V.

Deltapine 415: Has purple flowers, grey pubescence, and seed with imperfect black hila. Resistant to race 3 of soybean cyst nematode. Reported to be resistant to stem canker. Maturity Group V.

Deltapine 105: Has purple flowers, gray pubescence, and seed with imperfect black hila. Tolerant to phytophthora root-rot and susceptible to soybean cyst nematodes. Has yielded well under soybean cyst nematode-free conditions. Late Maturity Group V.

FFR 542: Has purple flowers, gray pubescence and seed with imperfect black hila. Has resistance to races 3 and 14 (moderate) soybean cyst nematode. Reported to have moderate resistance to stem canker and frogeye leaf spot.

FFR 561: Has white flowers, gray pubescence, and seed with buff hila. Has no resistance to soybean cyst nematodes. Maturity Group V. Has shown resistance to stem canker.

FFR 553: Has purple flowers, brown pubescence and seed with black hila. Has no resistance to soybean cyst nematode. Reported to have resistance to frogeye leaf spot and moderate resistance to stem canker. Maturity Group V.

FFR 563: Has purple flowers, gray pubescence and seed with an imperfect black hila. Resistant to races 3 and 14 soybean cyst nematode.

Hartz 5218: Has purple flowers, brown pubescence and seed with black hila. Resistance to race 3 soybean cyst nematode. Maturity Group V.

Hutcheson: Has white flowers, gray pubescence, and seed with a buff hila. Has high resistance to stem canker and moderate resistance to frogeye disease, Maturity group V. Has no resistance to soybean cyst nematodes.

Pioneer 9584: Has white flowers, tawny pubescence and seed of black hila. Resistant to race 3 soybean cyst nematode.

Pioneer brand 9593: Has white flowers, tawny pubescence, and seed with a black hila. Has resistance to Race 3 soybean cyst nematode. Maturity Group V.

Pioneer brand 9551: Has white flowers, tawny pubescence and seed with black hila. Has resistance to races 3 and 14 soybean cyst nematodes. Maturity Group V.

HyPerformer Hy 574: Has purple flowers, tawny pubescence and seed with black hila. Has no soybean cyst nematode resistance. Maturity group V.

HyPerformer HSC 591: Has white flowers, tawny pubescence, and seed with black hila. Has resistance to races 3 and 14 soybean cyst nematode. Maturity Group V.

TN 5-92: Has white flowers, gray pubescence, and seed with black hila. Has resistance to races 3 and 5 soybean cyst nematodes. Maturity Group V.

TN 5-95: Has purple flowers and tawny pubescence. Has resistance to races 3 and 14 soybean cyst nematode. Has resistance to frogeye and stem canker. Maturity Group V.

Terra-Vig 5693: Has purple flowers and gray pubescence, and seed with an imperfect black hila. Maturity Group V.

Maturity Group VI

Deltapine DP 3627: Has purple flowers, gray pubescence and seed with an imperfect hila. Has no resistance to soybean cyst nematode. Maturity Group VI.

Pioneer brand 9641: Has purple flowers, gray pubescence, and seed with imperfect hila. Has no soybean cyst nematode resistance. Maturity Group VI.

TN 6-90: Has white flowers, tawny pubescence, and seed with black hila. Has resistance to race 3 soybean cyst nematode. Has resistance to stem canker, frogeye and soybean mosaic virus. Maturity Group VI.

Northrup King S66-90: Has purple flowers, gray pubescence, and seed with buff hila. Has resistance to race 3 and 14 soybean cyst nematode. Reported to have resistance to stem canker. Maturity group VI.

GRAIN SORGHUM

Non-bird resistant varieties

DeKalb DK 40y: A medium variety in plant height and early maturity. Has a yellow endosperm. Reported to be resistant to MDMV and greenbug insects.

Deltapine G-522A: A medium-tall variety with resistance to MDMV, head smut, and anthracnose. Red pericarp and hetero-yellow endosperm.

Deltapine G-522DR: A medium variety in plant height with resistance to MDMV, head smut, anthracnose, and downy mildew. Red pericarp and hetero-yellow endosperm.

Deltapine 1552: A medium to tall variety medium in maturity. Has a hetero-yellow with a red pericarp. Reported to have resistance to head smut and anthracnose.

HyPerformer HSC Wings: A medium-tall variety with medium-tight heads. Hetero-yellow endosperm. Reported to be resistant to MDMV, head smut, anthracnose and downy mildew.

HyPerformer HSC Cherokee: A medium variety in plant height. Reddish-yellow grain color with a red pericarp and hetero-yellow endosperm. Reported to be resistant to MDMV, head smut, anthracnose and downy mildew.

Pioneer brand 8212y: A medium-tall variety in plant height with a semi-open head. Medium-full in maturity. Has yellow endosperm and X-yellow pericarp. Reported to have good resistance to downy mildew and head smut.

Pioneer brand 8446: A medium-tall variety with heads of bronze grain with a yellow endosperm. Reported to have excellent resistance to head smut, Fusarium rot and good resistance to gray leaf spot.

Northrup King KS 710: A non-bird resistant variety with hetero-yellow endosperm and brown pericarp. Has some tolerance to MDMV and head smut.

Topaz: A medium variety in plant height and maturity. Resistant to head smut and downy mildew. Red pericarp with a hetero-yellow endosperm.

OATS

Fall-Seeded

FFR Southern States 76-30: About two days earlier than Cumberland in maturity and a few inches taller in plant height. It has out-yielded Cumberland and Coker 716 in the state variety test with standing ability similar to Coker 716.

BARLEY

Anson: A medium maturing, medium test weight variety with good straw strength. It has good disease resistance to leaf rust and powdery mildew. Test weight has been similar to Wysor.

Wysor: A winter-type feed barley that is six-rowed and awnletted to awnless, with short rough awns usually occurring on central spikelets and occasionally on lateral spikelets. Wysor is similar to Henry in test weight, height, lodging, and winter hardiness. Wysor is reported to have good resistance to scald, powdery mildew and leaf rust found in Virginia. It is also reported to have some resistance to barley yellow dwarf virus.

WHEAT

FFR 525: An early maturity soft red winter wheat variety with fair test weight (bushel wt). It has been susceptible to leaf rust, mildew and glume blotch in trials.

FFR 350: An early-medium maturity soft red winter wheat variety with average test weight. Medium-tall in plant height.

FFR 555: A medium maturity soft red winter wheat variety with fair test weight. Has shown resistance to mildew and glume blotch.

Freedom: A medium maturity soft red winter wheat with low test weight. Has medium plant height and average test weight.

Gore: A medium maturing soft red winter wheat variety with average test weight, medium in plant height. Reported to have barley yellow dwarf and leaf rust resistance, not resistant to hessian fly.

Hickory: An awnless early-medium maturity soft red winter wheat with above average test weight. Reported to have resistance to some races of hessian fly.

Northrup King Coker 9803: An early maturity soft red winter variety with resistance to leaf rust and mildew with some tolerance to septoria leaf blotch and reported to be resistant to soil borne mosaic. Has good test weight.

Madison: A medium-early maturing, apically-awnletted white-chaffed cultivar of medium height and straw strength. Moderate resistance to powdery mildew, resistant to spindle streak virus, and moderately tolerant to septoria.

Mallard: An early-medium maturity soft red winter wheat variety with fair test weight. A short-strawed variety with good straw strength.

Pioneer brand 2580: An awned medium-maturing soft red winter wheat with average test weight. Not resistant to hessian fly.

Pioneer brand 2684: An awned medium-maturing soft red winter wheat with above average test weight. Pioneer brand 2684 and Pioneer brand 2580 are similar in plant height and lodging resistance. Pioneer brand 2684 has shown tolerance to some races of hessian fly.

Northrup King 9543: An early-medium maturity soft red winter wheat variety with good test weight. Reported to be resistant to hessian fly biotype E.

Jackson: A medium-maturing soft red winter wheat with average test weight. It is reported to have moderate resistance to powdery mildew and septorian leaf blotch. Jackson has been susceptible to leaf rust in the variety trials. Hessian fly resistance is not known at this time.

Sawyer: An early-maturing variety with moderate straw strength. It is similar in height to Saluda. It is reported to have moderate resistance to leaf and stem rust, powdery mildew, and septoria leaf blotch.

Verne: A soft red winter cultivar with medium early maturity. It has shown some tolerance to leaf rust, but has been susceptible to mildew and glume blotch.

Wakefield: An apically-awnletted, white-chaffed, mid-to-late season cultivar. It is reported to have some resistance to wheat spindle streak virus, and is moderately tolerant to septoria. Wakefield is a soft red winter wheat cultivar.

ALFALFA

Aggressor: A winter-hardy variety with good recovery ability. It is reported to be highly resistant to bacterial wilt, fusarium wilt, anthracnose and phytophthora root rot. It also has resistance to verticillium wilt.

Apollo Supreme: A winter-hardy variety with good recovery ability. Apollo Supreme is reported to be highly resistant to bacterial wilt, fusarium wilt and anthracnose. It also has high resistance to verticillium wilt.

Alfagraze: A variety developed for grazing. It is reported to have moderate resistance to bacterial wilt and anthracnose. It also has resistance to fusarium wilt. It has persisted well under frequent clipping and grazing studies.

Belmont: Flower color is purple and blue. Belmont starts growth early in the spring and recovers rapidly after cutting. It is reported to have high to moderate resistance to the wilts, root rots, stem and leaf diseases that attack alfalfa. Belmont is reported to have high resistance to the pea and spotted alfalfa aphids.

Chief: Similar fall dormancy to Saranac (4 rating). It is reported to have high resistance to bacterial wilt and moderate-high resistance to verticillium wilt, fusarium wilt and anthracnose.

Cimarron VR: A winter hardy variety with good recovery ability. It is reported to have high resistance to bacterial wilt, fusarium wilt and anthracnose. It also has resistance to phytophthora root rot and verticillium wilt.

Garst 636: Has a fall dormancy rating of 2. It is reported to have (HR) high resistance to bacterial wilt and moderate resistance to anthracnose. It is also reported to have resistance to verticillium wilt and fusarium wilt.

Legacy: A winter-hardy variety. It is reported to have high resistance to bacterial wilt, fusarium wilt, phytophthora root rot, and spotted alfalfa aphid. It is also reported to have resistance to verticillium wilt and anthracnose.

Multi-King 1: A winter-hardy variety that is reported to have a high leaf to stem ratio. It is also reported to have high resistance to bacterial wilt and fusarium wilt. It is also reported to have resistance to verticillium wilt, anthracnose and phytophthora root rot.

Pioneer brand 5432: A winter-hardy variety with good recovery ability. Reported to have high resistance to bacterial wilt and fusarium wilt. Has resistance to verticillium wilt and moderate resistance to phytophthora.

1996
PERFORMANCE OF FIELD CROP VARIETIES

Corn - Grain Sorghum - Summer Annuals - Oats
Barley - Wheat - Rye - Soybeans

DATA FOR 1996
WITH SUMMARIES OF RESULTS FROM PREVIOUS YEARS

INTRODUCTION

The purpose of the project, "Field Crop Variety Evaluation", is to test field crop varieties available to farmers in Tennessee and neighboring states, as well as the best experimental varieties being developed by experiment stations, other public agencies and private companies.

The tests were conducted using field plot designs, fertility levels and experimental techniques that have been found suitable for each crop.

Committees composed of specialists from the research, resident instruction and extension staffs of the University of Tennessee Institute of Agriculture (based on a study of the performance data) determine varieties to be recommended.

For a variety to be recommended, it must yield well and have other characteristics suitable for Tennessee conditions.

PRESENTATION OF DATA

The tests were conducted in each of the principal agricultural regions of the state where the specific crop is grown. Plots of each variety were replicated several times at each location. An average of the performance of a variety across the area of adaptation and over a period of years is the best basis for evaluation.

The tables on the following pages have been prepared with the entries listed in order of performance, the highest-yielding entry being listed first.

Least significant difference (L.S.D.) values at the five percent level for the 1996 tests are shown at the bottom of each table. Yields of any two varieties being compared must differ by at least this amount to be considered different in yielding ability. Also, coefficient of variation (C.V. %) values are shown at the bottom of each table. This value is a measure of the variability found within each experiment. At each location where tests were conducted in 1996, the soil types are reported at the end of the table.

PERFORMANCE OF CORN HYBRIDS FROM 1994 THROUGH 1996

The early-season hybrid trials were conducted at three locations, medium-season hybrids were evaluated at seven locations and the full-season hybrids were tested at four locations. At Jackson full-season hybrids were evaluated with and without irrigation. Early hybrids at Ames Plantation were also evaluated for response to irrigation.

All corn hybrid trials were over-planted and thinned to a population from 19,000 to 28,000 plants per acre. Population varied with location but was the same for all hybrids at a given location. Variation in population among locations was due to different row spacings. Spacing within the row was the same at all locations. Most tests were conducted using thirty to thirty-six inch row spacings. The tests were fertilized with 150 pounds or more of nitrogen per acre. A portion of the nitrogen was applied prior to seeding and the remainder was applied as a sidedressing. This practice was followed whenever possible. Phosphorus and potassium were applied at least in the amount recommended by soil test results. The plot size for mechanically-harvested plots was two rows 25 or 30 feet in length. Plots were replicated four times at each location. In 1996, the corn hybrid studies at Crossville, Ames Plantation, Jackson, Milan, Martin, Spring Hill, and Knoxville were harvested with a combine-sheller. At Ames Plantation in 1995, the full-season and early-season non-irrigated trials were hand-harvested. All corn trials at Milan were grown no-till following corn.

Two medium-season corn hybrid trials were grown each year with one being referred to as the 500 group and the other the 600 group. The 500 and 600 refer to the hybrid entry numbers. Two trials of this maturity group are conducted adjacent to each other whenever possible. Hybrids of mid-season maturity are evaluated in two groups because of the large number of hybrids submitted for testing. Any single corn test is limited to 40 entries.

Yield Results

Early-Season

The early-season data for 1996 are reported in Tables 1 through 6. Yields were high at all locations (Table 1). The average yield among environments ranged from 146 (Ames Plantation un-irrigated) to 229 bu/a at Knoxville (Table 1). The yield at Knoxville ranged from 197 to 255 bu per acre. The test at Knoxville was irrigated at silking. Without this irrigation, the yields would have been reduced. The C.V. (12.5) was highest at Ames Plantation (un-irrigated) and lowest (6.4) on irrigated plots in 1996.

Pioneer brand 3245, Pioneer brand 3335, and Zimmerman Z 62 W produced an average yield of 195 bu per acre, respectively (Table 1). Lodging was low at all locations in 1996. The early-season tests were not harvested at Crossville in 1995 or 1996 due to storm damage in 1995 and the lack of proper border in 1996. The ear height of these early-season hybrids ranged from 44 to 55 inches (Table 2). Average grain moisture at harvest ranged from a low of 12.2 to a high of 16.0% (Table 2).

Two years of early-season data are shown in Tables 3 and 4. The top producing hybrid, Pioneer brand 3260 produced significantly higher yields than the average of 178 bu/a. Terral TV 2543 was significantly lower than the average (Table 3). HyPerformer HY 9899 V had an average grain moisture at harvest of 15.1%. This was 1% higher than the next hybrid in the test (Table 4).

Ten early-season hybrids have been evaluated for three or more years (Tables 5 and 6). The leading hybrids in yield over the three year period (1994-96) at three locations were HyPerformer HS 9773, HyPerformer HY 9899V, Beck 72X and Pioneer brand 3245.

Medium-Season 500 Group

Results of the medium-season 500 group hybrids are reported in Tables 7 through 12. The growing season was good at most locations in 1996. No 1996 data are reported for Spring Hill due to a high C.V. and low R-Square value.

The yields at Knoxville are excellent due to one irrigation at silking and timely rainfall thereafter during the growing season.

The yields of individual hybrids range from a low of 96 bu/a at Springfield to a high of 266 bu/a at Knoxville. The average yield was 122 bu/a at Springfield to 146 at Crossville, 153 at Greeneville, 174 at Milan, 178 at Martin and 234 at Knoxville. FFR 883 GLS and Pioneer Brand 3223 produced the highest average yield of 188 and 187 bu/a respectively (Table 7). Eight hybrids produced higher yields than the mean of 168 bu/a (Table 7). The average ear height ranged from a low of 44 to a high of 55 inches. Lodged plants were low for all hybrids (Table 8).

The two year medium-season 500 group data are presented in Tables 9 and 10. Four Pioneer brand hybrids were among the highest producing hybrids in grain yield (Table 9). Four of the hybrids produced higher yields than the mean of 163 bu/a. The grain moisture at harvest ranged from 15.0 to 17.8 (Table 10).

Three years of results are presented in Tables 11 and 12. Again, Pioneer brand 3223, 3245, 3163, and 3154 were among the higher producing hybrids (Table 11). Three hybrids produced lower yields than the mean of 169.

Medium-Season 600 Group

The medium-season 600 data are reported in Tables 13 through 18. Pioneer brand 3245 was used as a check hybrid in the early-season and both 600 and 500 groups. FFR 943, ICI/Garst 8220 and Pioneer brand 3223 were among the highest producing hybrids of medium-season (Group 600).

Two years' data are reported in Tables 15 and 16. ICI/Garst 8220, DeKalb DK 714, FFR 943 and Pioneer brand 3245 produced higher yields than the mean of

167 bu/a (Table 15). The grain moisture at harvest ranged from a low of 14.8 to a high of 16.9 (Table 16).

Three years data for the medium-season (group 600) hybrids are shown in Tables 17 and 18. ICI/Garst 8220, DeKalb DK 714, and FFR 943 were the three leading hybrids in average yield (Table 17). The average ear height ranged from 48.0 to 54.4 in. (Table 18). Grain moisture at harvest ranged from 15.8 to 18.1%.

Full-Season

In 1996, Crow's 702, DeKalb DK 743, Asgrow E 939552, Pfister 3976, and Cargill 8936 produced higher yields than the mean of 182 bu/a (Table 19).

Two years' full-season data are shown in tables 21 and 22. Crow's 702, Pfister 3976 and DeKalb DK 743 produced higher yields than the mean of 181 bu per acre, and Ciba Funk's G 4714 produced yields lower than the mean (Table 21).

Three years' data for the full-season hybrids are shown in tables 23 and 24. Crow's 702, DeKalb DK 743 and Cargill 8936 were among the highest producing hybrids (Table 23).

Entries Arrived Late -- 1996

Seed of six hybrids were received late and they were not included in the regular hybrid trials. These hybrids were evaluated at five locations and the data are reported in Tables 25 and 26. The average moisture of these hybrids ranged from 16.1 to 19.4 (Table 26).

Table 1. Corn: Yield of early-season hybrids evaluated at three locations in 1996.

Color	Brand	Hybrid	Avg. Yield	Knox- ville	-Ames Plantation--		
					Milan	Irrigated ¹ Un-Irr.	
-----Bushels per acre-----							
Y Pioneer		3245	195	238	193	179	171
Y Pioneer		3335	195	252	201	189	139
W Zimmerman	Z 62 W		195	255	181	174	169
Y Pioneer		3260	192	249	180	192	149
Y HyPerformer	HS 9773		191	248	186	176	156
Y Beck		72X	188	246	178	170	158
Y Pioneer		3279	185	229	190	164	157
Y FFR		726	185	239	177	174	148
Y HyPerformer	HY 9899 V		182	228	161	174	166
Y Zimmerman	Z 41		181	238	174	166	146
Y Pioneer		3310	180	227	194	167	132
Y FFR		793	180	234	169	162	155
Y Northrup King	N7590		176	221	167	168	150
Y FFR		656	175	230	170	157	144
Y HyPerformer	HY 9646 ²		175	225	167	165	144
W Asgrow	RX 795 W		175	224	176	161	138
Y Asgrow	RX 770		173	235	163	153	142
Y Crow's		445	170	219	162	147	153
Y HyPerformer	HS 9843		169	225	152	166	135
Y Pioneer		3394	168	215	164	155	139
W HyPerformer	HY 9796 W		165	211	154	160	133
Y Terral	TV 2543		163	225	140	154	134
Y Northrup King	6800		153	198	159	131	124
Y Asgrow	RX 771		141	197	121	129	117
L.S.D. (.05)			11.6	25.1	23.6	14.7	25.8
C.V. %			9.4	7.7	9.8	6.4	12.5
Avg.			177.3	229.5	170.0	163.9	145.9
R-Square			0.83	0.54	0.61	0.74	0.48

¹Planted, thinned and harvested by hand in small plots and irrigated.

²Experimental number was HYX-6101.

Table 2. Corn: Yield and other characteristics of early-season hybrids evaluated at three locations in 1996.

Color	Brand	Hybrid	Avg Yield	Lodged Plants	Husk Cover	Ear Ht.	Grain Moisture at Harvest
			Bu/A	Avg. No.	Rating ¹	In.	%
Y	Pioneer	3245	195	0.3	2.5	51	13.3
Y	Pioneer	3335	195	0.7	3.8	50	12.7
W	Zimmerman	Z 62 W	195	0.9	2.0	55	13.5
Y	Pioneer	3260	192	0.8	3.7	53	13.5
Y	HyPerformer	HS 9773	191	1.4	1.7	52	13.2
Y	Beck	72X	188	1.4	2.7	53	13.2
Y	Pioneer	3279	185	0.4	3.3	50	12.9
Y	FFR	726	185	0.9	2.8	48	12.9
Y	HyPerformer	HY 9899 V	182	0.4	1.7	54	14.8
Y	Zimmerman	Z 41	181	0.6	3.2	49	12.8
Y	Pioneer	3310	180	1.1	2.3	52	13.1
Y	FFR	793	180	0.6	1.8	50	13.4
Y	Northrup King	N7590	176	0.6	1.8	47	13.1
Y	FFR	656	175	0.4	1.7	53	12.5
Y	HyPerformer	HY 9646 ²	175	0.4	2.3	55	13.5
W	Asgrow	RX 795 W	175	0.5	1.8	54	14.2
Y	Asgrow	RX 770	173	0.2	1.5	45	13.1
Y	Crow's	445	170	0.6	3.7	47	12.2
Y	HyPerformer	HS 9843	169	0.1	1.8	53	13.5
Y	Pioneer	3394	168	0.4	2.7	50	12.6
W	HyPerformer	HY 9796 W	165	0.6	1.5	50	16.0
Y	Terral	TV 2543	163	0.5	1.8	50	13.2
Y	Northrup King	6800	153	1.4	2.5	44	12.9
Y	Asgrow	RX 771	141	0.4	1.5	44	13.1

¹Rating is based on a scale of 1 through 9 with 1 being excellent and 9 poor.

²Experimental number was HYX-6101.

Table 3. Corn: Yield of early-season hybrids evaluated at three locations for two years (1995-96).

Color	Brand	Hybrid	Avg. Yield	Knoxville	Ames Plantation		
					Milan	Irrigated	Un-Irr.
-----Bushels per acre-----							
Y Pioneer		3260	190	210	180	207	162
Y Pioneer		3245	185	208	190	189	155
Y Pioneer		3335	185	213	197	201	130
Y HyPerformer	HS 9773		184	206	181	194	157
Y HyPerformer	HY 9899 V		184	209	175	192	162
Y Beck		72 X	184	208	182	193	152
W Zimmerman		Z 62 W	181	213	169	189	154
Y Pioneer		3310	180	194	193	186	146
Y Pioneer		3279	178	211	179	182	142
Y Zimmerman		Z 41	174	203	169	176	147
Y FFR		793	172	199	169	176	145
Y HyPerformer	HY 9843		170	197	158	183	142
Y Pioneer		3394	169	190	169	176	142
Y Northrup King	N 7590		168	193	163	181	137
Y Terral	TV 2543		164	198	143	175	137
L.S.D. (.05)			9.6	N.S.	18.1	13.4	N.S.
C.V.%			11.0	9.8	10.4	7.2	16.7
Avg.			178.0	203.4	174.5	186.7	147.4
R-Square			0.73	0.80	0.50	0.74	0.31

Table 4. Corn: Yield and other characteristics of early-season hybrids evaluated at three locations for two years (1995-96).

Color	Brand	Hybrid	Avg. Yield	Lodged Plants	Husk Cover	Ear Ht.	Grain Moisture At Harvest
Y Pioneer		3260	190	0.5	3.9	54	14.1
Y Pioneer		3245	185	0.8	3.0	51	13.8
Y Pioneer		3335	185	0.6	4.0	50	13.3
Y HyPerformer	HS 9773		184	1.0	2.4	54	13.6
Y HyPerformer	HY 9899 V		184	0.5	2.2	54	15.1
Y Beck		72X	184	1.3	2.8	54	13.7
W Zimmerman		Z 62 W	181	0.6	2.6	56	14.0
Y Pioneer		3310	180	0.7	2.9	52	13.8
Y Pioneer		3279	178	0.3	3.6	50	13.7
Y Zimmerman		Z 41	174	0.4	3.7	50	13.4
Y FFR		793	172	0.5	2.2	52	13.8
Y HyPerformer	HY 9843		170	0.1	2.1	54	13.8
Y Pioneer		3394	169	0.6	3.3	50	13.2
Y Northrup King	N7590		168	0.8	2.3	49	13.7
Y Terral	TV 2543		164	0.6	2.2	52	13.9

¹Rating based on a scale of 1 through 9 with 1 being excellent and 9 poor.

Table 5. Corn: Yield of early-season hybrids evaluated at three locations for three years (1994-96).

Color	Brand	Hybrid	Avg. Yield	Knox-ville	Milan	Ames Plantation	
						Un-Irr.	Irrigated
-----Bushels per acre-----							
Y	HyPerformer	HS 9773	183	209	177	151	196
Y	HyPerformer	HY 9899 V	183	212	174	162	186
Y	Beck	72X	181	213	173	145	194
Y	Pioneer	3245	180	210	175	150	184
W	Zimmerman	Z 62 W	176	214	163	142	184
Y	Pioneer	3279	176	210	165	139	187
Y	FFR	793	169	203	161	138	176
Y	Northrup King	N 7590	166	195	161	133	177
Y	Pioneer	3394	166	195	161	131	176
Y	HyPerformer	HS 9843	165	197	149	137	177
L.S.D. (.05)			7.4	14.4	14.4	17.9	12.2
C.V.%			10.6	8.6	10.7	15.4	5.2
Avg.			174.5	205.7	165.9	142.8	183.8
R-square			0.75	0.76	0.54	0.44	0.63

Table 6. Corn: Yield and other characteristics of early-season hybrids evaluated at three locations for three years (1994-96).

Color	Brand	Hybrid	Avg. Yield	Lodged Plants	Ear Ht.	Grain Moisture at Harvest
Y	HyPerformer	HS 9773	183	1.1	55.5	14.5
Y	HyPerformer	HY 9899 V	183	1.0	55.5	16.3
Y	Beck	72X	181	1.3	56.2	14.6
Y	Pioneer	3245	180	0.7	51.1	14.3
W	Zimmerman	Z 62 W	176	0.8	57.3	14.6
Y	Pioneer	3279	176	0.5	51.4	14.2
Y	FFR	793	169	0.9	53.7	14.6
Y	Northrup King	N 7590	166	0.9	50.8	14.3
Y	Pioneer	3394	166	0.7	51.2	13.6
Y	HyPerformer	HS 9843	165	0.3	55.5	14.3

Table 7. Corn: Yield of medium-season (Group 500) hybrids evaluated at six locations in 1996.

Color	Brand	Hybrid	Avg. Yield	Knox- ville	Greene- ville	Cross- ville	Spring- field	Milan	Martin
-----Bushels per acre-----									
Y	FFR	883 GLS	188	260	173	159	138	197	205
Y	Pioneer	3223	187	264	165	179	129	202	181
Y	Beck	8280	183	266	174	164	133	177	187
Y	Pioneer	3245	182	229	167	145	135	205	209
Y	Pioneer	3153	182	229	174	164	122	206	196
Y	Crow's	685	182	262	162	146	150	176	194
Y	Pioneer	3163	179	262	176	161	127	182	166
Y	Zimmerman Z	37	179	261	182	158	115	170	187
Y	DeKalb DK	687	178	249	138	166	122	188	208
Y	AgraTech	787	177	242	151	157	125	193	192
W	FFR Exp.	70083	175	248	159	155	134	176	178
Y	Pioneer	3156	172	246	163	142	132	172	179
W	Beck Exp.	2251	171	230	172	137	117	172	198
Y	Asgrow RX	893	171	234	150	158	118	174	190
Y	DeKalb DK	626	170	231	130	151	128	186	195
W	FFR	737 W	170	233	165	144	125	180	174
Y	Ciba Funk G	4581	170	238	156	148	120	169	187
Y	Zimmerman Z	29	169	229	148	154	107	184	192
Y	N.K. ¹ X	7095	169	241	153	177	115	158	168
Y	FFR Exp.	14194	168	219	146	144	143	167	190
Y	HyPer. ² HY	9919 V	168	251	141	148	117	165	184
Y	Mycogen	7250 cb	167	225	140	165	132	168	169
W	Pioneer	3203 W	166	234	147	152	107	179	176
Y	AgraTech AT	X 5770	166	231	147	131	131	182	172
Y	Ciba	5221 X	165	238	141	149	113	181	165
Y	Beck	6205	164	221	143	139	96	184	202
W	Zimmerman Z	72 W	164	236	150	129	112	181	177
Y	Gutwein	2696	164	244	161	120	113	162	184
Y	Gutwein	2810	162	222	143	154	116	163	177
Y	AgraTech	810	162	230	145	130	142	183	145
Y	DeKalb DK	642	162	232	132	148	119	168	175
Y	N.K. ¹ N	7931	162	211	151	136	133	170	171
Y	N.K. ¹ N	8020	161	235	156	144	107	165	161
Y	Pioneer	3154	159	223	157	151	115	159	147
Y	Ciba	6216 X	158	201	147	130	130	165	174
Y	N.K. ¹ X	7445	155	215	136	144	111	159	167
Y	Beck	87 MDM	154	217	139	114	121	174	156
Y	AgraTech AT	X 5710	149	206	150	131	113	144	149
Y	Tn. Exp.	Tn 96-3	147	216	142	127	103	153	142
W	Tn. Exp.	Tn 96-4	131	199	138	74	103	143	131
L.S.D. (.05)			10.2	22.0	22.7	25.5	24.1	23.7	24.8
C.V. %			10.7	6.8	10.6	12.5	14.1	9.7	10.0
Avg.			167.7	234.0	152.8	145.6	121.6	174.5	177.6
R-square			0.86	0.61	0.50	0.66	0.44	0.51	0.59

¹N.K.=Northrup King.

²Hyper=Hyperperformer.

Table 8. Corn: Yield and other characteristics of medium-season (Group 500) hybrids evaluated at six locations in 1996.

Color Brand Hybrid	Avg. Yield	Lodged Plants	Husk Cover	Ear Ht.	Grain Moisture at Harvest
	Bu/A	Avg. No.	Rating ¹	In.	%
Y FFR 883 GLS	188	1.2	4.2	48	16.1
Y Pioneer 3223	187	0.6	3.5	54	14.6
Y Beck 8280	183	1.9	3.7	53	15.1
Y Pioneer 3245	182	1.2	3.6	49	13.8
Y Pioneer 3153	182	0.9	3.3	51	14.7
Y Crow's 685	182	0.7	3.0	48	14.3
Y Pioneer 3163	179	1.4	3.5	50	14.4
Y Zimmerman Z 37	179	0.7	3.7	51	15.2
Y DeKalb DK 687	178	0.9	3.2	50	15.2
Y AgraTech 787	177	1.1	3.0	49	14.4
W FFR Exp. 70083	175	0.7	3.5	49	15.6
Y Pioneer 3156	172	1.0	3.0	52	15.0
W Beck Exp. 2251	171	1.6	3.8	54	13.9
Y Asgrow RX 893	171	0.9	3.6	47	14.5
Y DeKalb DK 626	170	1.6	4.0	47	13.1
W FFR 737 W	170	0.8	3.7	51	14.4
Y Ciba Funk G 4581	170	0.6	3.1	52	14.3
Y Zimmerman Z 29	169	0.6	2.9	55	14.6
Y Northrup King X 7095	169	2.8	3.3	50	13.9
Y FFR Exp. 14194	168	0.8	3.2	48	14.2
Y HyPerformer HY 9919 V	168	1.5	3.8	49	15.9
Y Mycogen 7250 cb	167	0.8	4.2	45	14.2
W Pioneer 3203 W	166	1.6	4.2	50	15.8
Y AgraTech AT X 5770	166	1.2	3.2	54	14.5
Y Ciba 5221 X	165	0.9	4.3	48	13.9
Y Beck 6205	164	1.0	4.2	49	13.8
W Zimmerman Z 72 W	164	0.7	2.8	51	15.2
Y Gutwein 2696	164	0.9	4.1	53	16.4
Y Gutwein 2810	162	0.6	2.7	51	14.2
Y AgraTech 810	162	0.3	3.6	48	14.6
Y DeKalb DK 642	162	1.3	4.3	44	14.0
Y Northrup King N 7931	162	1.7	3.8	51	14.9
Y Northrup King N 8020	161	0.9	3.0	51	14.2
Y Pioneer 3154	159	1.1	3.9	51	15.2
Y Ciba 6216 X	158	1.9	3.7	49	14.3
Y Northrup King X 7445	155	0.6	3.7	50	14.4
Y Beck 87 MDM	154	1.8	3.1	53	16.6
Y AgraTech AT x 5710	149	0.9	4.4	46	14.1
Y Tn. Exp. Tn 96-3	147	1.4	3.1	45	15.8
W Tn. Exp. Tn 96-4	131	1.3	3.5	51	15.1

¹Rating based on a scale of 1 through 9 with 1 being excellent and 9 poor.

Table 9. Corn: Yield of medium-season (Group 500) hybrids evaluated in 11 environments from 1995 through 1996.

Color Brand Hybrid	Avg. Yield	Knox-ville	Greene-ville	Cross-ville	Spring-field	Spring Hill		Martin	
						Milan			
		-----Number of environments (Years)-----							
		11	2	1	1	2	1	2	2
		-----Bushels per acre-----							
Y Pioneer	3153	178	210	174	164	138	159	202	183
Y Pioneer	3245	178	217	167	145	142	124	204	199
Y Pioneer	3223	176	222	165	179	146	127	189	174
Y Pioneer	3163	172	231	176	161	138	148	174	163
Y Gutwein	2696	165	208	161	120	144	142	169	175
Y Pioneer	3156	163	211	163	142	134	129	164	172
Y AgraTech	787	162	204	151	157	130	102	178	173
Y Pioneer	3154	162	206	157	151	137	137	163	161
Y N.K. ¹ N	7931	160	198	151	136	139	137	162	169
W Pioneer	3203 W	160	207	147	152	123	112	176	167
Y Zimmerman Z	29	159	197	148	154	125	115	172	175
Y Gutwein	2810	158	197	143	154	132	126	162	165
Y Asgrow RX	893	156	195	150	158	122	118	158	169
Y N.K. ¹ N	8020	155	198	156	144	126	137	160	150
Y Beck	87 MDM	146	181	139	114	115	110	166	161
L.S.D. (.05)		7.8	14.2	21.1	25.4	18.2	28.3		15.5
C.V.%		11.4	7.0	9.5	11.9	13.8	15.5		9.2
Avg.		163.4	205.5	156.6	148.7	132.6	128.1		170.5
R-Square		0.79	0.88	0.53	0.69	0.61	0.62		0.60

¹N.K.=Northrup King.

Table 10. Corn: Yield and other characteristics of medium-season (Group 500) hybrids evaluated in 11 environments from 1995 through 1996.

Color Brand Hybrid	Avg. Yield	Lodged Plants	Husk Cover	Ear Ht.	Grain Moisture at Harvest
	Bu/A	No.	Rating ¹	In.	%
Y Pioneer 3153	178	0.5	3.6	52	15.9
Y Pioneer 3245	178	0.8	4.0	49	15.0
Y Pioneer 3223	176	0.5	4.1	54	15.7
Y Pioneer 3163	172	1.0	4.0	50	15.4
Y Gutwein 2696	165	0.7	4.3	54	16.7
Y Pioneer 3156	163	0.8	3.4	53	15.9
Y AgraTech 787	162	0.6	3.6	50	15.4
Y Pioneer 3154	162	0.8	4.2	53	16.3
Y Northrup King N 7931	160	1.0	4.1	51	16.0
W Pioneer 3203 W	160	1.1	4.3	51	16.6
Y Zimmerman Z 29	159	0.4	3.3	56	15.6
Y Gutwein 2810	158	0.4	3.3	52	15.2
Y Asgrow RX 893	156	0.6	3.8	48	15.4
Y Northrup King N 8020	155	0.6	3.5	53	15.3
Y Beck 87 MDM	146	1.2	3.7	55	17.8

¹Rating based on a scale of 1 through 9 with 1 being excellent and 9 poor.

Table 11 . Corn: Yield of medium-season (Group 500) hybrids evaluated in 15 environments from 1994 through 1996.

Color Brand Hybrid	Avg. Yield	Knox-ville	Greene-ville	Cross-ville	Spring Hill	Spring-field	Milan	Martin	
									-----Number of environments (Years)-----
		15	3	2	2	1	2	3	2
		-----Bushels per acre-----							
Y Pioneer	3223	184	230	181	202	127	146	178	174
Y Pioneer	3245	181	222	177	171	124	142	184	199
Y Pioneer	3163	180	239	191	176	148	138	167	163
Y Pioneer	3154	172	219	177	172	137	137	162	161
Y AgraTech	787	170	211	168	177	102	130	172	173
W Pioneer	3203 W	169	209	171	184	112	123	170	167
Y Pioneer	3156	169	212	175	167	129	134	156	172
Y Asgrow	RX 893	167	208	169	185	118	122	156	169
Y Zimmerman	Z 29	165	205	157	171	115	125	165	175
Y Gutwein	2810	161	194	154	169	126	132	155	165
Y N.K. ¹	N 8020	159	201	159	157	137	126	153	150
Y Beck	87 MDM	156	194	160	147	110	115	161	161
L.S.D. (.05)		6.3	11.4	13.8	20.5	28.7	18.2	12.8	16.3
C.V. %		10.4	6.6	8.2	11.9	16.1	14.0	9.6	9.6
Avg.		169.3	212.0	170.0	173.1	123.7	130.8	164.8	169.1
R-Square		0.82	0.87	0.73	0.71	0.60	0.56	0.64	0.60

¹N.K.=Northrup King.

Table 12. Corn: Yield and other characteristics of medium-season (Group 500) hybrids evaluated in 15 environments from 1994 through 1996.

Color Brand Hybrid	Avg. Yield	Lodged Plants	Ear Ht.	Grain Moisture at Harvest	
				In.	%
Y Pioneer	3223	Bu/A	No.		
Y Pioneer	3245	184	0.6	55.7	16.2
Y Pioneer	3163	181	0.7	49.3	15.6
Y Pioneer	3154	180	1.0	51.1	16.0
Y Pioneer	3154	172	0.8	54.4	17.1
Y AgraTech	787	170	0.6	51.2	16.1
W Pioneer	3203 W	169	1.0	52.2	17.4
Y Pioneer	3156	169	0.7	54.2	16.7
Y Asgrow	RX 893	167	0.6	49.9	16.3
Y Zimmerman	Z 29	165	0.4	57.7	16.3
Y Gutwein	2810	161	0.4	53.6	15.8
Y Northrup King	N 8020	159	0.5	53.8	15.9
Y Beck	87 MDM	156	1.2	56.9	19.0

Table 13. Corn: Yield of medium-season (Group 600) hybrids evaluated at seven locations in 1996.

Color brand	Hybrid	Avg. Yield	Knox-ville	Greene-ville	Cross-ville	Spring-field	Spring Hill	Milan	Martin
-----Bushels per acre-----									
Y FFR	943	180	253	165	195	125	133	217	229
Y ICI/Garst	8220	178	261	170	178	121	133	227	217
Y Pioneer	3223	176	263	152	209	119	120	209	217
Y Pioneer	3163	174	263	162	189	135	102	205	204
Y Funk's	5510A	173	265	168	189	108	110	215	223
Y Pioneer	3153	172	240	151	192	138	118	181	216
Y DeKalb DK	714	167	266	149	197	117	89	190	212
Y Pioneer	3245	166	245	139	176	115	110	210	218
Y Asgrow X	918337	165	261	143	186	115	105	182	214
W Pioneer	3203W	165	258	136	183	119	86	204	214
Y Pioneer	3154	163	240	161	175	132	131	154	176
Y Terra TR	1185	161	234	135	183	117	85	197	215
Y Terra E	1154	160	235	151	164	126	112	171	191
Y Terra E	1157	159	216	127	187	127	106	187	193
Y Pioneer	3156	159	234	147	186	125	104	165	184
Y Terra TR	3367	158	230	150	181	117	114	170	187
Y FFR	827	158	254	124	182	100	98	200	207
Y SC ¹ SC	912	157	249	154	165	106	101	175	198
Y ICI/Garst N	3241	154	220	134	172	116	83	200	190
Y ICI/Garst	8325	154	201	139	177	125	102	185	175
Y Pioneer	3395 IR	153	198	138	166	114	96	191	209
Y SC ¹ SC	612	153	192	134	178	114	106	185	200
Y FFR	793	153	213	140	173	117	102	170	189
Y DeKalb DK	683	149	234	118	172	103	89	189	188
W Asgrow XP	9465W	149	221	133	168	109	83	182	187
Y Asgrow X	917768	148	230	118	173	107	110	165	173
W Asgrow RX	943 W	147	221	122	157	112	98	170	188
Y Funk's	5516	146	210	124	177	117	112	158	151
Y Gutwein	2610	144	222	111	158	107	84	177	186
Y SC ¹ SC	412	143	210	131	156	104	104	160	176
L.S.D. (.05)		8.7	27.1	21.2	21.7	18.8	21.5	20.2	20.5
C.V. %		11.1	8.2	10.7	8.7	16.3	14.5	7.7	7.4
Avg.		159.5	234.7	140.8	178.2	116.9	104.2	186.3	197.6
R-Square		0.90	0.64	0.65	0.60	0.30	0.54	0.70	0.68

¹ SC=Southern Cross.

Table 14. Yield and characteristics of medium-season (Group 600) hybrids evaluated at seven locations in 1996.

Color Brand	Hybrid	Avg. Yield	Lodged Plants	Husk Cover	Ear Ht.	Grain Moisture at Harvest
		Bu/A	No.	Rating ¹	In.	%
Y FFR	943	180	1.2	4.1	46	16.1
Y ICI/Garst	8220	178	0.9	4.4	49	16.3
Y Pioneer	3223	176	2.1	3.5	51	14.9
Y Pioneer	3163	174	1.2	4.1	52	14.5
Y Funk's	5510 A	173	0.6	4.4	47	16.3
Y Pioneer	3153	172	1.4	3.9	51	15.1
Y DeKalb	DK 714	167	0.8	3.4	51	15.6
Y Pioneer	3245	166	1.8	4.3	48	14.3
Y Asgrow	X 918337	165	1.1	3.6	47	15.0
W Pioneer	3203 W	165	2.0	5.3	47	16.0
Y Pioneer	3154	163	3.1	4.3	51	15.5
Y Terra	TR 1185	161	1.7	3.5	50	15.6
Y Terra	E 1154	160	1.8	3.4	54	14.4
Y Terra	E 1157	159	0.9	3.9	53	14.2
Y Pioneer	3156	159	2.0	3.6	52	15.0
Y Terra	TR 3367	158	0.7	3.7	50	14.3
Y FFR	827	158	1.6	4.2	49	15.5
Y Southern Cross	SC 912	157	0.3	4.4	47	16.3
Y ICI/Garst	N 3241	154	1.0	4.2	48	13.8
Y ICI/Garst	8325	154	0.6	4.4	51	14.3
Y Pioneer	3395 IR	153	2.5	4.8	50	13.5
Y Southern Cross	SC 612	153	0.5	4.1	45	14.9
Y FFR	793	153	0.9	3.8	49	14.7
Y DeKalb	DK 683	149	1.1	3.6	47	14.4
W Asgrow	XP 9465 W	149	0.7	3.6	48	16.9
Y Asgrow	X 917768	148	0.9	3.6	47	15.2
W Asgrow	RX 943 W	147	1.2	3.4	52	15.7
Y Funk's	5516	146	1.4	3.9	49	14.4
Y Gutwein	2610	144	1.4	5.3	46	13.7
Y Southern Cross	SC 412	143	0.8	3.8	49	14.0

¹Rating based on a scale of 1 through 9 with 1 being excellent and 9 poor.

Table 15. Corn: Yield of medium-season (Group 600) hybrids evaluated in 10 environments from 1995 through 1996.

Color Brand Hybrid	Avg. Yield	Knox-	Greene-	Cross-	Spring-	Milan	Martin	
		ville	ville	ville	field			
		-----Number of environments (Years)-----						
		10	2	1	1	2	2	
		-----Bushels per acre-----						
Y ICI/Garst	8220	181	220	170	178	136	195	204
Y DeKalb	DK 714	179	217	149	197	138	185	204
Y FFR	943	178	214	165	195	139	177	201
Y Pioneer	3245	174	220	139	176	133	178	200
Y Terra	TR 1185	172	211	135	183	134	178	194
Y FFR	827	166	213	124	182	117	181	192
Y Terra	TR 1167	161	197	150	181	133	157	168
Y DeKalb	DK 683	161	205	118	172	118	172	187
Y FFR	793	160	189	140	173	131	160	180
Y Funk's	5516	152	185	124	177	132	145	158
W Asgrow	RX 943 W	152	192	122	157	125	150	168
L.S.D. (.05)		6.1	18.1	21.2	20.8	14.6	21.8	15.4
C.V.%		11.6	8.9	10.5	8.0	13.8	12.8	8.2
Avg.		167.0	205.7	139.6	179.0	130.5	170.8	187.0
R-Square		0.82	0.84	0.74	0.65	0.70	0.69	0.75

Table 16. Corn: Yield and other characteristics of medium-season (Group 600) hybrids evaluated in 10 environments from 1995 through 1996.

Color Brand	Hybrid	Avg.	Lodged	Husk	Ear	Grain Moisture
		Yield	Plants	Cover	Ht.	at Harvest
		BU/A	No.	Rating ¹	In.	%
Y ICI/Garst	8220	181	0.3	4.6	48	16.9
Y DeKalb	DK 714	179	0.3	3.7	51	16.1
Y FFR	943	178	0.9	4.5	47	16.6
Y Pioneer	3245	174	0.7	4.5	47	14.8
Y Terra	TR 1185	172	0.7	4.0	51	16.1
Y FFR	827	166	0.8	4.3	50	16.1
Terra	TR 1167	161	0.3	3.8	51	14.9
Y DeKalb	DK 683	161	0.5	4.0	49	15.3
Y FFR	793	160	0.5	4.0	49	15.0
Y Funk's	5516	152	0.7	4.2	51	15.0
W Asgrow	RX 943 W	152	0.5	3.7	53	16.3

¹Rating based on a scale of 1 through 9 with 1 being excellent and 9 poor.

Table 17. Corn: Yield of medium-season (Group 600) hybrids evaluated in 15 environments from 1994 through 1996.

Color Brand Hybrid	Avg. Yield	Knox-ville	Greene-ville	Cross-ville	Spring-field	Milan	Martin
	15	3	2	2	3	3	2
	-----Bushels per acre-----						
Y ICI/Garst 8220	186	222	190	189	149	185	204
Y DeKalb DK 714	181	215	176	189	150	172	204
Y FFR 943	181	209	183	191	152	170	201
Y Terra TR 1185	174	208	168	185	145	163	194
Y DeKalb DK 683	167	209	149	168	138	163	187
Y FFR 793	166	195	155	178	143	156	180
Y Terra TR 1167	164	201	163	177	137	155	168
Y Funk's 5516	161	190	150	182	148	145	158
W Asgrow RX 943 W	157	193	153	165	133	144	168
L.S.D. (.05)	6.6	14.3	12.0	18.5	15.0	14.2	15.9
C.V.%	11.1	8.6	7.2	10.2	14.9	10.8	8.6
Avg.	170.9	204.7	165.1	180.6	143.8	161.4	185.0
R-Square	0.78	0.80	0.89	0.40	0.71	0.74	0.75

Table 18. Corn: Yield and other characteristics of medium-season (Group 600) hybrids evaluated in 15 environments from 1994 through 1996.

Color Brand Hybrid	Avg. Yield	Lodged Plants	Ear Ht.	Grain Moisture at harvest
Y ICI/Garst 8220	186	0.2	49.3	18.1
Y DeKalb DK 714	181	0.3	52.1	17.2
Y FFR 943	181	0.8	48.0	18.0
Y Terra TR 1185	174	0.6	52.5	17.5
Y DeKalb DK 683	167	0.4	50.8	16.2
Y FFR 793	166	0.4	49.4	16.1
Y Terra TR 1167	164	0.3	51.7	15.8
Y Funk's 5516	161	0.6	51.5	15.8
W Asgrow RX 943 W	157	0.4	54.4	17.5

Table 19. Corn: Yield of full-season hybrids evaluated at five locations in 1996.

Color Brand	Hybrid	Avg. Yield	Knox-ville	Ames		Jackson	
				Plantation	UnIrr.	UnIrr.	Irr.
-----Bushels per acre-----							
Y Crow's	702	205	278	163	161	216	
Y DeKalb	DK 743	198	249	153	161	227	
Y Asgrow	E 939552	197	257	163	142	225	
Y Pfister	3976	196	249	150	157	228	
Y Cargill	8936	195	259	157	156	208	
Y FFR	883 GLS	191	257	160	142	207	
W Zimmerman	Z 64 W	190	258	158	136	210	
Y Asgrow	E 930062	189	239	144	156	216	
Y Cargill	9027	188	237	146	152	218	
Y Mycogen	8460	188	241	152	152	207	
Y Asgrow	RX 983	188	245	153	151	202	
Y Pioneer	3154	181	264	138	140	185	
Y Bo-Jac	605	180	229	144	142	206	
Y Funk's	5670	180	231	145	138	206	
Y Bo-Jac	614	177	216	136	154	203	
Y Northrup King	N 8811	177	254	128	123	202	
Y Ciba Funk's	G 4714	176	229	140	141	194	
Y Cargill	8327	175	205	153	148	196	
W FFR	907 W	174	221	147	130	196	
Y Terral	TV 2930	172	217	132	143	194	
Y Northrup King	X 8655	168	237	130	124	184	
W Tn. Exp.	Tn 91-6 W	166	227	125	129	186	
Y Bo-Jac	629	164	198	125	149	183	
Y Tn. Exp.	Tn 96-2	154	191	124	123	178	
L.S.D. (.05)		11.6	25.4	21.8	20.8	24.0	
C.V.%		9.1	7.6	10.7	10.3	8.4	
Avg.		182.0	237.0	144.4	143.6	203.2	
R-Square		0.90	0.68	0.47	0.52	0.48	

Table 20. Corn: Yield and other characteristics of full-season hybrids evaluated at five locations in 1996.

Color Brand	Hybrid	Avg. Yield	Lodged Plants	Husk Cover	Ear Ht.	Grain Moisture at Harvest
		Bu/A	Avg. No.	Rating ¹	In.	%
Y Crow's	702	205	0.4	3.7	51	15.7
Y DeKalb	DK 743	198	0.5	2.5	54	16.2
Y Asgrow	E 939552	197	1.0	2.7	58	13.8
Y Pfister	3976	196	0.5	2.5	54	15.3
Y Cargill	8936	195	1.1	4.5	55	15.4
Y FFR	883 GLS	191	0.5	3.0	51	14.9
W Zimmerman	Z 64 W	190	2.2	1.3	54	15.2
Y Asgrow	E 930062	189	1.4	5.0	58	14.7
Y Cargill	9027	188	0.9	3.5	53	15.6
Y Mycogen	8460	188	0.1	2.7	54	15.2
Y Asgrow	RX 983	188	0.1	3.2	58	15.5
Y Pioneer	3154	181	2.4	3.2	54	15.1
Y Bo-Jac	605	180	0.6	4.2	59	13.5
Y Funk's	5670	180	0.5	2.7	55	15.9
Y Bo-Jac	614	177	0.2	3.7	58	14.1
Y Northrup King	N 8811	177	0.2	2.0	49	17.4
Y Ciba Funk's	G 4714	176	1.1	1.3	59	14.9
Y Cargill	8327	175	0.2	1.8	54	13.9
W FFR	907 W	174	0.9	1.8	55	15.2
Y Terral	TV 2930	172	1.0	2.5	55	15.7
Y Northrup King	X 8655	168	0.8	1.3	53	16.9
W Tn Exp.	Tn 91-6 W	166	1.3	2.5	55	18.2
Y Bo-Jac	629	164	0.1	2.0	53	13.9
Y Tn. Exp.	Tn 96-2	154	10.3	4.5	57	14.8

¹Rating based on a scale of 1 through 9 with 1 being excellent and 9 poor.

Table 21. Corn: Yield of full-season hybrids evaluated at five locations for two years (1995-96).

Color Brand	Hybrid	Avg.	Knox-	Jackson		Ames
		Yield	ville	UnIrr.	Irr.	Plantation
-----Bushels per acre-----						
Y Crow's	702	198	234	181	214	164
Y Pfister	3976	190	210	176	220	152
Y DeKalb	DK 743	189	209	177	221	149
Y Cargill	8936	188	215	171	208	157
Y Mycogene	8460	187	214	169	202	161
Y FFR	883 GLS	184	217	166	205	146
W Zimmerman	Z 64 W	182	208	161	209	149
Y Funk's	5670	181	204	165	202	155
Y Pioneer	3154	178	224	159	187	144
Y Asgrow	RX 983	177	196	168	200	145
Y Terral	TV 2930	174	189	163	200	144
Y N.K. ¹	N 8811	172	208	153	197	132
Y Cargill	8327	170	180	162	196	144
Y Ciba Funk	G 4714	168	191	163	193	127
L.S.D. (.05)		7.5	15.2	12.8	14.9	16.1
C.V. %		8.4	7.4	7.7	7.4	11.2
Avg.		181.4	107.1	166.6	103.9	147.8
R-Squared		0.86	0.91	0.81	0.39	0.49

¹N.K.—Northrup King.

Table 22. Corn: Yield and other characteristics of full-season hybrids evaluated at five locations for two years (1995-96).

Color Brand	Hybrid	Avg.	Lodged	Husk	Ear	Grain Moisture
		Yield	Plants	Cover	Ht.	at Harvest
		Bu/A	Avg. No.	Rating ²	In.	%
Y Crow's	702	198	0.3	3.0	52	16.8
Y Pfister	3976	190	0.4	2.6	54	16.1
Y DeKalb	DK 743	189	0.3	2.3	55	17.5
Y Cargill	8936	188	0.8	3.3	55	16.0
Y Mycogene	8460	187	0.6	2.7	54	16.1
Y FFR	883 GLS	184	0.3	2.9	52	16.0
W Zimmerman	Z 64 W	182	1.7	1.5	55	16.1
Y Funk's	5670	181	0.9	2.4	54	16.8
Y Pioneer	3154	178	1.5	2.9	53	16.0
Y Asgrow	RX 983	177	0.1	2.6	56	16.6
Y Terral	TV 2930	174	1.1	2.1	53	16.5
Y N.K. ¹	N 8811	172	0.5	2.0	50	18.3
Y Cargill	8327	170	0.4	2.1	54	14.8
Y Ciba Funk	G 4714	168	0.8	1.6	58	16.0

¹N.K.—Northrup King.

²Rating based on a scale of 1 through 9 with 1 being excellent and 9 poor.

Table 23. Corn: Yield of full-season hybrids evaluated at five locations for three years (1994-96).

Color Brand	Hybrid	Avg. Yield	Knox-ville	Ames Plantation	Jackson	
					UnIrr.	Irr.
-----Bushels per acre-----						
Y Crow's	702	183	222	154	167	190
Y DeKalb	DK 743	182	215	156	165	192
Y Cargill	8936	182	218	157	164	188
Y Pioneer	3154	180	233	147	160	179
Y FFR	883 GLS	177	221	145	158	184
Y Asgrow	RX 983	175	206	149	161	184
W Zimmerman	Z 64 W	175	215	149	150	187
Y Terral	TV 2930	173	203	151	159	179
Y Northrup King	N 8811	169	215	130	148	182
Y Ciba	Funk G 4714	168	203	136	156	175
Y Cargill	8327	166	189	138	158	177
L.S.D. (.05)		6.2	11.2	14.4	9.4	12.1
C.V.%		8.9	6.5	12.1	7.3	8.1
Avg.		175.4	212.8	146.4	158.8	183.5
R-square		0.86	0.91	0.47	0.82	0.84

Table 24. Corn: Yield and other characteristics of full-season hybrids evaluated at five locations for three years (1994-96).

Color Brand	Hybrid	Avg. Yield	Lodged Plants	Ear Ht.	Grain Moisture at Harvest	
					Bu/A	Avg. No.
Y Crow's	702	183	0.3	52.0	17.6	
Y DeKalb	DK 743	182	0.3	54.8	18.3	
Y Cargill	8936	182	0.9	54.6	16.5	
Y Pioneer	3154	180	1.4	56.5	17.0	
Y FFR	883 GLS	177	0.5	51.2	16.8	
Y Asgrow	RX 983	175	1.0	57.0	17.5	
W Zimmerman	Z 64 W	175	1.9	55.8	16.7	
Y Terral	TV 2930	173	1.3	53.9	17.6	
Y Northrup King	N 8811	169	1.0	50.3	19.1	
Y Ciba	Funk G 4714	168	1.0	59.5	17.2	
Y Cargill	8327	166	1.2	54.3	15.5	

Table 25. Corn: Yield of miscellaneous hybrids evaluated at five locations in 1996.

Color /Brand	Hybrid	Avg. Yield	Knox-ville	Jackson	Ames Plantation	Milan	Martin
-----Bushels per acre-----							
Y Terral ¹	TVX 2575	207	217	239	188	200	190
Y ICI/Garst	8220	205	226	216	163	216	205
Y Pioneer	3245	198	197	251	168	182	194
Y Northrup King X	7634 CBR ²	178	204	206	128	173	177
Y Terral	TVX 1565	173	167	206	144	181	170
Y Northrup King X	6534 CBR	170	181	196	144	163	168
L.S.D. (.05)		11.8	27.1	22.7	36.9	21.8	N.S.
C.V.%		10.0	9.1	6.9	15.7	7.8	11.1
Avg.		188.6	198.6	219.0	155.8	185.7	183.8
R-Squared		0.75	0.68	0.74	0.54	0.72	0.43

¹Seed of Terral TVX 2575 and TVX 1565 were received late and were not included in the regular variety trials. ICI/Garst 8220 and Pioneer brand 3245 were included as check varieties.

²CBR Hybrids contain the Bt gene resistance to European corn borer.

Table 26. Corn: Yield and characteristics miscellaneous hybrids evaluated at five locations in 1996.

Color Brand Hybrid	Avg. Yield	Lodged Plants	Husk Cover	Ear Ht.	Grain Moisture at Harvest
	Bu/A	No.	Rating ¹	In.	%
Y Terral TVX 2575	207	0.4	1.9	59	17.4
Y ICI/Garst 8220	205	0.6	3.2	52	19.4
Y Pioneer 3245	198	1.1	3.5	54	17.0
Y Northrup King X 7634 CBR	178	0.1	1.8	49	17.1
Y Terral TVX 1565	173	1.2	4.4	51	16.1
Y Northrup King X 6534 CBR	170	0.2	2.5	51	16.9

¹Rating based of a scale of 1 through 9 with 1 being excellent and 9 poor.

-----Wheat-----

Thirty-six soft red winter wheat varieties were evaluated at Knoxville, Greeneville, Crossville, Spring Hill, Springfield, Milan, Martin, and Jackson in 1996. Ten varieties were evaluated at Ames Plantation in 1996.

The wheat variety trials at Jackson were severely injured by a late spring freeze in 1996. Winter injury was also noted at Springfield, Crossville, and Milan in 1996. The yield of all varieties at Crossville was reduced from the late spring freeze.

The wheat data are reported in Tables 27 through 41 with 1996 data in Tables 27 through 36. Pioneer brand 2552, Pioneer brand 2568, Shiloh, Hopewell and Verne were among the top producing varieties in 1996 (Table 27). Trical 498, Morey and Clemson 201 were among the lowest producing varieties in 1996. Low yields were primarily due to winter and spring cold injury. Clemson 201 and Morey did not perform well at any location in 1996.

The percent stand for the state, excluding Jackson, is presented in table 28. Clemson 201, Morey and Trical 498 had the poorest spring stand which ranged from 21 % to 29 % (Table 28).

The maturity, plant height and test weight data are shown by individual locations in 1996 due to the variability in winter injury from location to location. These data are shown in Tables 29 through 36.

The Jackson data were not included in the state average because many varieties had a 100% winter kill and eleven out of 36 had a stand of 10% or less in the late spring (Table 36).

Ten wheat varieties were evaluated at Ames Plantation in 1996 with FFR 555, Clemens, Cardinal and FFR 525 among the leading varieties in yield, (Table 37).

The two-year wheat data are presented in Tables 38 and 39. The leading varieties for yield using a two-year average across six locations were Verne, Pioneer brand 2580, Pioneer brand 2684, Shiloh, and Clemens (Table 38). Trical 498 (Triticale), Stuckey and Morey produced lower yields than the two-year average mean of 52.5 BU/A (Table 38).

The three-year wheat data are shown in Tables 41 and 42. The leading varieties in yield were Verne, Pioneer brand 2580, Pioneer brand 2684, FFR 555 and Pioneer brand 2628 (Table 40). Using the three year average Madison produced three bushels more than Wakefield. Madison produced higher yields than Wakefield the past two years (1995 and 1996).

The recommended wheat varieties for 1996-97 are FFR 525, FFR 555, FFR 350¹, Freedom, Gore¹, Hickory, Northrup King Coker 9803, Madison, Mallard¹, Pioneer brand 2580, Pioneer brand 2684, Pioneer brand 2628, Northrup King Coker 9543, Jackson, Sawyer¹, Verne and Wakefield.

-----Barley-----

Five winter barley varieties were evaluated in 1996 (Tables 42 through 46). There was no difference in average yield among the first four varieties. Pamunkey produced the lowest average yield of 59 bushels per acre (Table 46). No data are reported for Jackson and Crossville due to winter kill.

-----Fall-seeded Oats-----

No yield data are reported for winter oats in 1996 due to winter killing of all varieties.

-----Spring Oats-----

Spring oats were evaluated at two locations in 1996. The data are reported in Tables 47 and 48. The top five yielding varieties were Prairie, Horicon, Brawn, Ogle and Dane. Centennial produced the lowest average yield at both Knoxville and Springfield in 1996.

¹Present plans indicate that these varieties will not be recommended after 1996.

-----Rye and Triticale-----

Three Triticale varieties were evaluated with six rye varieties for grain at Knoxville in 1996, (Table 49). A forage trial was conducted where fall-seeded oats, wheat, rye, and triticale were compared in the same test. This data will be reported in the Forage Research Report which will be published at a later date.

Table 27. Wheat: Yield of wheat varieties evaluated at seven locations in 1996.

Brand/Variety	Avg. Yield	Knox-ville	Greene-ville	Cross-ville	Spring-field	Spring Hill	Milan	Martin
-----Bushels per acre-----								
Pioneer 2552	64	51	62	36	73	70	78	79
Pioneer 2568	62	52	70	30	70	57	75	80
AgriPro Shiloh	59	50	71	30	64	58	67	72
OH Hopewell	59	45	80	29	59	61	66	72
KY Verne	58	51	64	26	70	62	72	60
Pioneer 2628	57	45	62	27	65	59	76	65
FFR 555	57	48	65	20	62	62	72	70
OH Glory	56	47	59	28	67	57	69	65
KY Exp. 85 C-31-6	56	47	60	26	62	54	74	70
AgriPro Clemens	56	41	65	24	69	62	64	66
Pioneer 2684	56	48	60	21	67	51	71	71
VA Madison	55	54	56	21	68	57	68	63
OH Freedom	55	45	66	18	70	49	69	69
Pioneer 2580	54	41	59	22	76	49	69	64
KY American Patriot	54	46	58	18	66	56	69	64
N.K. Coker 9663	54	40	72	21	69	61	48	64
Terral TVX 8555	54	42	56	17	74	51	72	64
N.K. Coker 9474	53	42	59	13	63	67	64	62
N.K. Coker 9543	52	48	59	21	65	48	56	69
AgriPro Hickory	52	50	59	20	57	54	62	62
FFR 525	51	48	57	14	59	60	62	56
N.K. Coker 9803	51	45	60	20	71	47	66	48
VA Featherstone 520	51	45	65	23	52	50	66	52
VA Jackson	50	44	57	13	67	51	59	59
Terral TVX 8825	50	42	59	25	60	47	56	58
VA Wakefield	49	43	54	10	75	34	70	55
AR Hazen	48	40	55	13	73	49	60	49
Pioneer 2691	47	43	55	19	57	32	61	64
AgriPro Mason	46	45	52	20	45	46	60	57
GA Dozier	46	40	60	13	56	43	57	55
Pioneer 2643	45	41	56	15	59	38	58	47
GA Stuckey	44	45	51	10	57	45	51	49
RSI Trical 498	38	53	54	17	52	35	20	33
AR Exp. 26158-4	37	41	45	14	37	34	49	38
GA Morey	27	30	46	9	42	22	19	25
SC Clemson 201	24	28	48	6	34	32	12	10
L.S.D. (.05)	4.1	7.2	9.3	5.0	17.3	10.6	10.5	11.0
C.V. %	15.3	11.6	11.2	18.2	20.0	15.0	12.3	13.4
Avg.	50.7	44.7	59.4	19.2	61.9	50.3	60.7	58.5
R-Square	0.89	0.63	0.64	0.84	0.49	0.74	0.85	0.84

Table 28. Wheat: Yield and other characteristics of varieties evaluated in 1996.

Brand/Variety		Yield	Date	Date	Plant	Bushel	Stand
			Headed	Mature	Ht.	Weight	
		Bu/A			In.	Lb/Bu.	%
Pioneer	2552	64	5-12	6-13	31	56.0	83
Pioneer	2568	62	5-10	6-11	31	53.3	86
AgriPro	Shiloh	59	5-11	6-13	31	53.5	83
OH	Hopewell	59	5-13	6-14	34	53.4	89
KY	Verne	58	5-11	6-12	37	54.7	77
Pioneer	2628	57	5-11	6-11	30	53.5	80
FFR	555	57	5-12	6-14	31	53.3	78
OH	Glory	56	5-11	6-12	31	55.2	90
KY Exp.	85 C-31-6	56	5-12	6-14	31	54.1	88
AgriPro	Clemens	56	5-12	6-13	35	52.6	87
Pioneer	2684	56	5-10	6-12	31	55.1	72
VA	Madison	55	5-10	6-12	32	52.8	78
OH	Freedom	55	5-12	6-14	33	50.9	84
Pioneer	2580	54	5-10	6-11	30	51.9	83
KY	American Patriot	54	5-10	6-12	32	52.3	84
Terral	TVX 8555	54	5-13	6-12	29	52.3	75
N.K. Coker	9474	53	5-10	6-12	31	55.1	86
N.K. Coker	9543	52	5-10	6-11	29	54.7	83
AgriPro	Hickory	52	5-10	6-12	32	52.0	69
FFR	525	51	5-11	6-12	32	53.9	67
N.K. Coker	9803	51	5-10	6-13	29	55.3	65
N.K.	9663	51	5-11	6-15	35	54.2	77
VA	Featherstone 520	51	5-11	6-14	31	54.6	69
VA	Jackson	50	5-13	6-13	30	52.1	67
Terral	TVX 8825	50	5-14	6-17	33	54.7	66
VA	Wakefield	49	5-15	6-16	34	52.3	69
AR	Hazen	48	5-13	6-12	31	53.0	71
Pioneer	2691	47	5-10	6-12	29	52.2	66
AgriPro	Mason	46	5- 9	6-12	30	52.6	67
GA	Dozier	46	5-13	6-12	28	53.7	72
Pioneer	2643	45	5-13	6-15	27	53.2	62
GA	Stuckey	44	5-11	6-11	29	52.8	69
RSI Trical	498	38	5- 9	6-17	36	46.0	27
AR Exp.	26158-4	37	5-11	6-15	28	54.7	51
GA	Morey	27	5-14	6-16	29	50.3	29
SC	Clemson 201	24	5-15	6-17	30	49.2	21

Table 29. Wheat: Yield and other characteristics of varieties evaluated at Greenville in 1996.

Brand/Variety		Yield	Date Headed	Date Mature	Plant Height	Bushel Weight
		Bu/A			in	Lb/Bu
OH	Hopewell	80	5-11	6-16	36	56.0
N.K.	9663	72	5-7	6-18	40	57.1
AgriPro	Shiloh	71	5-10	6-14	33	54.2
Pioneer	2568	70	5-9	6-14	33	55.2
OH	Freedom	66	5-10	6-17	37	54.9
VA Featherstone 520		65	5-10	6-17	33	56.9
AgriPro	Clemens	65	5-10	6-15	40	56.0
FFR	555	65	5-9	6-16	34	56.6
KY	Verne	64	5-9	6-15	39	55.9
Pioneer	2552	62	5-10	6-15	34	56.3
Pioneer	2628	62	5-9	6-14	32	55.7
Pioneer	2684	60	5-7	6-13	33	56.5
KY Exp. 85	C-31-6	60	5-9	6-17	35	56.7
N.K. Coker	9803	60	5-9	6-15	31	57.3
GA	Dozier	60	5-10	6-14	31	56.8
OH	Glory	59	5-11	6-15	33	55.6
N.K. Coker	9474	59	5-7	6-13	32	58.4
Terral	TVX 8825	59	5-12	6-18	38	57.0
Pioneer	2580	59	5-8	6-13	32	55.2
AgriPro	Hickory	59	5-7	6-13	33	56.6
N.K.	Coker 9543	59	5-7	6-13	31	56.9
KY American	Patriot	58	5-7	6-13	31	55.5
FFR	525 61	57	5-7	6-13	35	55.3
VA	Jackson	57	5-12	6-14	32	55.7
Pioneer	2643	56	5-9	6-16	28	53.9
Terral	TVX 8555	56	5-12	6-15	32	54.1
VA	Madison	56	5-7	6-13	35	54.9
AR	Hazen	55	5-11	6-15	33	56.2
Pioneer	2691	55	5-7	6-13	30	54.6
RSP Trical	498	54	5-7	6-18	42	49.1
VA	Wakefield	54	5-11	6-17	37	56.6
AgriPro	Mason	52	5-7	6-14	34	55.2
GA	Stuckey	51	5-8	6-14	30	55.5
SC	Clemson 201	48	5-12	6-16	34	56.2
GA	Morey	46	5-12	6-17	35	54.3
AR Exp.	26158-4	45	5-8	6-15	30	57.2
L.S.D (.05)		9.3				
C.V.%		11.2				
Avg.		59.4				
R-Square		0.64				

Table 30. Wheat: Yield and other characteristics of varieties evaluated at Knoxville in 1996.

Brand/Variety		Yield	Date Headed	Date Mature	Plant Height	Bushel Weight
		Bu/A			In.	Lb/Bu
VA	Madison	54	5-9	6-12	32	55.7
RSI Trical	498	53	5-7	6-14	37	47.4
Pioneer	2568	52	5-8	6-10	30	55.5
KY	Verne	51	5-12	6-12	35	56.0
Pioneer	2552	51	5-13	6-13	30	57.6
AgriPro	Shiloh	50	5-10	6-11	30	55.0
AgriPro	Hickory	50	5-9	6-11	32	55.3
FFR	525	48	5-11	6-13	31	56.2
Pioneer	2684	48	5-9	6-12	30	58.5
FFR	555	48	5-12	6-14	29	54.5
N.K. Coker	9543	48	5-9	6-12	27	56.2
OH	Glory	47	5-10	6-13	28	56.7
KY Exp.	85 C-31-6	47	5-11	6-13	29	55.3
KY American	Patriot	46	5-9	6-13	31	54.0
Pioneer	2628	45	5-11	6-11	30	55.1
VA Featherstone	520	45	5-12	6-15	31	55.7
GA	Stuckey	45	5-10	6-11	30	54.0
OH	Hopewell	45	5-14	6-13	33	52.7
OH	Freedom	45	5-13	6-14	33	52.2
N.K. Coker	9803	45	5-10	6-13	28	57.1
AgriPro	Mason	45	5-7	6-10	29	54.0
VA	Jackson	44	5-13	6-14	30	54.5
VA	Wakefield	43	5-17	6-16	34	54.7
Pioneer	2691	43	5-7	6-10	29	53.7
N.K. Coker	9474	42	5-9	6-11	31	58.1
Terral	TVX 8555	42	5-14	6-13	28	53.6
Terral	TVX 8825	42	5-17	6-16	34	55.1
AR Exp.	26158-4	41	5-10	6-13	28	57.7
Pioneer	2580	41	5-11	6-11	29	52.2
AgriPro	Clemens	41	5-13	6-13	35	52.4
Pioneer	2643	41	5-14	6-14	25	57.1
N.K. Coker	9663	40	5-13	6-15	34	54.1
AR	Hazen	40	5-14	6-13	30	55.3
GA	Dozier	40	5-12	6-12	27	55.2
GA	Morey	30	5-17	6-16	30	52.2
SC	Clemson 201	25	5-18	6-16	31	53.2
L.S.D. (.05)		7.2				
C.V. %		11.6				
Avg.		44.6				
R-Squared		0.63				

Table 31. Wheat: Yield and other characteristics of varieties evaluated at Crossville in 1996.

Brand/Variety	Yield	Date Headed	Date Mature	Plant Height	Bushel Weigh	Stand
	Bu/A			In.	Lb/Bu	%
Pioneer 2552	36	5-20	6-20	29	51.5	70
Pioneer 2568	30	5-17	6-15	29	47.9	80
AgriPro Shiloh	30	5-20	6-23	29	50.1	70
OH Hopewell	29	5-22	6-25	30	48.1	80
OH Glory	28	5-20	6-19	30	49.3	80
Pioneer 2628	27	5-18	6-18	27	48.0	60
KY Verne	26	5-20	6-20	34	49.1	50
KY Exp. 85 C-31-6	26	5-20	6-21	29	47.7	100
Terral TVX 8825	25	5-26	6-28	30	48.1	50
AgriPro Clemens	24	5-21	6-20	31	46.9	80
VA Featherstone 520	23	5-21	6-20	28	47.3	70
Pioneer 2580	22	5-17	6-16	26	44.4	60
VA Madison	21	5-21	6-24	29	43.7	50
N.K. 9663	21	5-20	6-26	31	45.6	50
Pioneer 2684	21	5-21	6-20	29	47.9	50
N.K. Coker 9543	21	5-18	6-18	27	48.0	70
AgriPro Hickory	20	5-19	6-21	28	45.0	50
AgriPro Mason	20	5-17	6-18	28	45.0	50
FFR 555	20	5-22	6-25	30	45.2	50
N.K. Coker 9803	20	5-17	6-20	27	47.7	40
Pioneer 2691	19	5-18	6-16	29	43.7	60
OH Freedom	18	5-24	6-24	30	41.8	60
KY American Patriot	18	5-20	6-16	30	44.2	70
Terral TVX 8555	17	5-22	6-17	30	43.9	50
RSI Trical 498	17	5-16	6-29	36	41.8	30
Pioneer 2643	15	5-23	6-22	27	43.6	40
FFR 525	14	5-24	6-19	28	43.6	30
AR Exp. 26158-4	14	5-20	6-22	25	45.0	40
GA Dozier	13	5-22	6-19	26	45.5	50
VA Jackson	13	5-26	6-20	27	39.9	40
N.K. Coker 9474	13	5-20	6-25	27	44.6	60
AR Hazen	13	5-23	6-17	29	41.1	50
GA Stuckey	10	5-22	6-16	25	44.0	40
VA Wakefield	10	5-27	6-29	33	38.7	40
GA Morey	9	5-23	6-26	27	40.8	30
SC Clemson 201	16	5-27	6-30	28	39.0	10
L.S.D. (.05)	5.0					
c.v. %	18.2					
Avg.	19.6					
R-Square	0.84					

Table 32. Wheat: Yield and other characteristics of varieties evaluated at Springfield in 1996.

Brand/variety		Yield	Date Headed	Date Mature	Plant Height	Bushel Weight	¹ Stand
		Bu/A			In.	Lb/Bu	
Pioneer	2580	76	5-5	6-9	31	54.0	10
VA	Wakefield	75	5-6	6-13	33	56.0	9
Terral	TVX 8555	74	5-6	6-13	29	55.2	9
AR	Hazen	73	5-6	6-13	30	55.7	7
Pioneer	2552	73	5-7	6-13	32	57.1	8
N.K. Coker	9803	71	5-5	6-12	29	57.6	7
OH	Freedom	70	5-5	6-14	34	52.2	9
KY	Verne	70	5-6	6-11	37	56.3	8
Pioneer	2568	70	5-5	6-9	32	52.7	10
N.K.	9663	69	5-7	6-13	33	56.7	8
AgriPro	Clemens	69	5-6	6-12	34	52.8	8
VA	Madison	68	5-5	6-11	33	56.4	9
VA	Jackson	67	5-5	6-12	29	55.2	8
Pioneer	2684	67	5-5	6-12	31	55.5	9
OH	Glory	67	5-5	6-13	31	58.9	9
KY American	Patriot	66	5-7	6-11	34	52.5	9
Pioneer	2628	65	5-7	6-12	30	53.7	8
N.K. Coker	9543	65	5-6	6-10	29	56.6	10
AgriPro	Shiloh	64	5-6	6-14	30	53.5	8
N.K. Coker	9474	63	5-7	6-9	32	56.5	9
KY Exp.	85 C-31-6	62	5-6	6-14	33	54.7	8
FFR	555	62	5-7	6-14	32	54.2	8
Terral	TVX 8825	60	5-5	6-16	32	56.8	6
FFR	525	59	5-6	6-12	30	58.9	8
Pioneer	2643	59	5-7	6-14	26	54.6	7
OH	Hopewell	59	5-6	6-13	33	55.0	8
AgriPro	Hickory	57	5-6	6-12	31	46.6	6
GA	Stuckey	57	5-6	6-11	30	55.1	8
Pioneer	2691	57	5-8	6-12	27	54.3	7
GA	Dozier	56	5-6	6-13	27	55.3	8
VA	Featherstone 520	52	5-5	6-14	31	56.3	6
RSI Trical	498	52	5-6	6-16	36	47.9	5
AgriPro	Mason	45	5-6	6-13	30	53.3	5
GA	Morey	42	5-4	6-14	25	53.8	5
AR Exp	26158-4	37	5-4	6-13	27	56.9	5
SC	Clemson 201	34	5-5	6-15	30	52.0	3
L.S.D. (.05)		17.3					
C.V. %		19.9					
Avg.		62.0					
R-Squared		0.49					

¹Rating based on a scale of 1 to 10 with 10 being 100 %.

Table 33. Wheat: Yield and other characteristics of varieties evaluated at Spring Hill in 1996.

Brand/Variety		Yield	Date Headed	Date Mature	Plant Height	Stand
		Bu/A			In.	%
Pioneer	2552	70	5-12	6-8	31	80
N.K. Coker	9474	67	5-8	6-2	32	98
KY	Verne	62	5-8	6-5	37	80
AgriPro	Clemens	62	5-10	6-7	35	90
FFR	555	62	5-9	6-6	31	80
N.K.	9663	61	5-8	6-8	34	80
OH	Hopewell	61	5-15	6-7	34	100
FFR	525	60	5-9	6-3	34	70
Pioneer	2628	59	5-8	6-5	31	80
AgriPro	Shiloh	58	5-9	6-5	32	90
OH	Glory	57	5-8	6-6	32	90
Pioneer	2568	57	5-10	6-7	32	70
VA	Madison	57	5-9	6-5	34	80
KY	American Patriot	56	5-8	6-5	33	80
KY	Exp 85 C-31-6	54	5-12	6-7	31	80
AgriPro	Hickory	54	5-8	6-5	34	70
Terral	TVX 8555	51	5-13	6-5	30	70
Pioneer	2684	51	5-10	6-5	31	60
VA	Jackson	51	5-10	6-4	30	60
VA	Fetherstone	50	5-10	6-8	34	60
Pioneer	2580	49	5-8	6-4	30	70
AR	Hazen	49	5-12	6-5	32	60
OH	Freedom	49	5-10	6-6	32	90
N.K. Coker	9543	48	5-8	6-4	29	70
Terral	TVX 8825	47	5-12	6-9	33	60
N.K. Coker	9803	47	5-9	6-6	31	50
AgriPro	Mason	46	5-8	6-4	31	70
GA	Stuckey	45	5-10	6-4	30	60
GA	Dozier	43	5-3	6-6	29	70
Pioneer	2643	38	5-2	6-9	29	50
PSI	Trical 498	35	5-11	6-9	37	30
AR Exp	26158-4	34	5-12	6-9	30	40
VA	Wakefield	34	5-16	6-6	35	60
SC	Clemson 201	32	5-15	6-9	33	40
Pioneer	2691	32	5-11	6-7	30	40
GA	Morey	23	5-14	6-8	24	40
L.S.D. (.05)		10.6				
C.V. %		15.0				
Avg.		50.3				
R-Squared		0.74				

Table 34. Wheat: Yield and other characteristics of varieties evaluated at Martin in 1996.

Brand/Variety		Yield	Date Mature	Plant Height
		Bu/A		In.
Pioneer	2568	80	6-12	31
Pioneer	2552	79	6-15	30
AgriPro	Shiloh	72	6-12	31
OH	Hopewell	72	6-15	32
Pioneer	2684	71	6-13	30
KY Wxp	85 C-31-6	70	6-16	31
FFR	555	70	6-14	30
N.K. Coker	9543	69	6-12	29
OH	Freedom	69	6-15	33
AgriPro	Clemens	66	6-12	32
Pioneer	2628	65	6-17	30
OH	Glory	65	6-13	30
N.K.	9663	64	6-16	33
KY American	Patriot	64	6-13	31
Terral	TVS 8555	64	6-15	28
Pioneer	2580	64	6-11	29
Pioneer	2691	64	6-15	30
VA	Madison	63	6-11	30
N.K. Coker	9474	62	6-12	30
AgriPro	Hickory	62	6-11	31
KY	Verne	60	6-12	35
VA	Jackson	59	6-13	30
Terral	TVX 8825	58	6-19	32
AgriPro	Mason	57	6-12	29
FFR	525	56	6-12	31
GA	Dozier	55	6-12	28
VA	Wakefield	55	6-19	33
VA Featherstone	520	52	6-13	29
GA	Stuckey	49	6-14	29
AR	Hazen	49	6-14	29
N.K. Coker	9803	48	6-15	29
Pioneer	2643	47	6-19	26
AR Exp	26158-4	38	6-17	29
RSI Trical	498	33	6-19	35
GA	Morey 30	25	6-19	28
SC	Clemson 201	10	6-18	27
L.S.D. (.05)		11.0		
C.V. %		13.4		
Avg.		58.5		
R-square		0.84		

Table 35. Wheat: Yield and other characteristics of varieties evaluated at Milan in 1996.

Brand/Variety		Yield	Date Mature	Plant Ht.	Bushel Weight	Stand
		Bu/A		In.	Lb/Bu.	%
Pioneer	2552	78	6-0	33	57.4	100
Pioneer	2628	76	6-0	33	55.0	100
Pioneer	2568	75	6-0	32	54.9	100
KY Exp.	85 C-31-6	74	6-1	32	56.0	98
KY	Verne	72	6-1	41	56.1	100
FFR	555	72	6-2	33	55.7	100
Terral	TVX 8555	72	6-0	31	54.7	93
Pioneer	2684	71	6-0	32	57.3	98
VA	Wakefield	70	6-1	37	55.4	95
Pioneer	2580	69	6-1	33	53.6	100
OH	Glory	69	6-0	33	55.5	100
OH	Freedom	69	6-1	36	53.3	100
KY	American Patriot	69	6-1	35	55.3	100
VA	Madison	68	6-1	34	54.4	100
AgriPro	Shiloh	67	6-0	33	54.7	100
OH	Hopewell	66	6-0	38	55.2	100
N.K. Coker	9803	66	6-1	31	57.4	95
VA	Featherstone 520	66	6-1	33	56.8	93
AgriPro	Clemens	64	6-0	38	54.9	100
N.K. Coker	9474	64	6-0	36	58.2	100
FFR	525	62	6-1	34	55.5	98
AgriPro	Hickory	62	6-0	34	56.6	100
Pioneer	2691	61	6-0	29	55.2	93
AgriPro	Mason	60	6-0	33	55.7	100
AR	Hazen	60	6-0	34	56.8	98
VA	Jackson	59	6-2	35	55.5	93
Pioneer	2643	58	6-2	28	56.6	90
GA	Dozier	57	6-1	29	55.6	93
Terral	TVX 8825	56	6-3	35	56.2	90
N.K. Coker	9843	56	6-0	31	55.8	98
GA	Stuckey	51	6-1	29	55.3	95
AR Exp.	26158-4	49	6-4	30	57.3	80
N.K.	9663	29	6-2	39	57.6	98
RSI Trical	498	20	6-4	34	43.9	80
GA	Morey	19	6-4	28	51.5	10
SC	Clemson 201	12	6-4	28	45.5	20
L.S.D.. (.05)		10.5				
C.V.%		12.3				
Avg.		60.7				
R-Square		0.85				

Table 36. Wheat: Yield and other characteristics of varieties evaluated at Jackson in 1996 when planted 10-30-1995.

Brand/Variety	Yield	Date Headed	Date Mature	Plant Ht.	² Stand	
					3-4-96	3-18-96
	Bu/A			IN	%	%
KY American Patriot	50	5- 9	6-6	33	100	80
OH Hopewell	47	5-16	6-7	35	100	80
KY Exp 85 C-31-6	45	5-13	6-7	34	100	70
AgriPro Shiloh	45	5-14	6-6	33	90	60
Pioneer 2552	44	5-14	6-7	31	90	60
OH Glory	42	5-13	6-6	32	100	70
N.K. Coker 9474	41	5- 8	6-6	31	100	80
Pioneer 2568	40	5- 8	6-6	32	90	40
AgriPro Clemens	39	5-14	6-9	35	100	60
KY Verne	38	5-16	6-6	33	90	40
OH Freedom	35	5-17	6-9	33	90	50
N.K. 9663	34	5-16	6-10	35	100	50
Pioneer 2628	33	5-12	6-6	31	80	30
Pioneer 2580	32	5-11	6-6	31	90	40
AgriPro Hickory	29	5-12	6-9	32	80	40
N.K. Coker 9543	29	5-13	6-6	31	90	40
FFR 555	28	5-13	6-9	31	90	30
VA Madison	27	5-17	6-9	31	70	30
Terral TVX 8555	26	5-13	6-6	31	90	30
Pioneer 2684	25	5-14	6-9	30	100	40
FFR 525	25	5-16	6-9	32	70	20
VA Jackson	22	5-16	6-7	30	70	20
Terral TVX 8825	21	5-18	6-14	32	70	20
AgriPro Mason	20	5-13	6-9	31	90	30
GA Dozier	18	5-17	6-9	29	60	10
VA Wakefield	15	5-18	6-12	30	50	10
VA Featherstone 520	12	5-18	6-11	28	90	10
N.K. Coker 9803	11	5-18	6-11	27	70	10
GA Stuckey	7	5-18	6-10	25	60	10
Pioneer 2643	--	¹ --	--	--	70	10
GA Morey	--	--	--	--	00	00
GA Dozier	--	--	--	--	60	12
RSI Trical 498	--	--	--	--	00	00
SC Clemson 201	--	--	--	--	00	00
Pioneer 2691	--	--	--	--	70	08
AR Hazen	--	--	--	--	80	15
AR Exp 26518-4	--	--	--	--	20	02
L.S.D. (.05)	6.4					
C.V.% Avg.	15.2					
Avg.	30.2					
R-Square	0.92					

¹(--) No data due to Winter injury and Spring freeze.

²Severe drop in temperature on Jan. 19 (Max 65 Min 12) and March 7 (Max 70 Min 25) followed by a Max of 28 Min 13 (March 8, 1996) and a Max of 23 and Min of 12 on March 9.

Table 37. Wheat: Yield and other characteristics of ten wheat varieties evaluated at Ames Plantation in 1996.

Brand/Variety		Yield	Date Headed	Plant Ht.
		Bu/A	May	In.
FFR	555	49	28	28
AgriPro	Clemens	47	28	33
OH	Cardinal	47	29	33
FFR	525	46	27	29
Coker	9803	43	27	25
Pioneer	2580	43	26	25
Pioneer	2684	42	28	27
VA	Wakefield	42	29	32
FFR	350	41	27	28
IN	Fillmore	39	34	31
L.S.D. (.05)		N.S.		
C.V.%		12.3		
Avg.		44.0		
R-Squared		0.43		

Table 38. Wheat: Yield of varieties evaluated at six locations for two years (1995-96).

Brand/Variety		Avg. Yield	Knox-ville	Cross-ville	Spring Hill	Spring-field	Milan	Martin
-----Bushels per acre-----								
KY	Verne	57	63	34	50	59	76	62
Pioneer	2580	57	58	30	46	61	83	65
Pioneer	2684	57	64	31	42	55	81	66
AgriPro	Shiloh	56	63	34	45	51	73	68
AgriPro	Clemens	56	55	33	51	55	73	67
N.K. Coker	9803	55	59	34	41	60	78	60
FFR	555	55	60	31	46	52	77	64
VA	Madison	55	60	29	47	56	78	60
KY American	Patriot	55	63	33	45	54	75	61
Terral TVX	8555	55	54	31	40	58	79	67
OH	Glory	55	58	35	46	56	72	62
Pioneer	2628	55	56	33	46	54	77	62
AgriPro	Hickory	54	65	33	42	49	71	63
OH	Freedom	53	58	29	40	55	74	64
N.K. Coker	9543	53	58	31	41	54	69	67
VA	Jackson	53	62	27	40	56	70	62
Pioneer	2643	51	60	29	37	54	76	50
Terral TVX	8825	51	55	29	40	55	67	60
FFR	525	51	60	22	45	48	70	58
N.K. Coker	9474	50	54	23	47	47	70	56
VA	Wakefield	49	54	22	34	54	75	56
GA	Dozier	49	55	26	38	44	72	59
RSI Trical	498	48	72	23	35	50	52	58
GA	Stuckey	48	58	20	41	46	68	52
GA	Morey	38	48	14	26	40	56	42
L.S.D. (.05)		3.2	5.7	4.3	7.1	8.2	7.2	8.8
C.V. %		15.4	9.8	15.2	17.1	15.8	10.0	14.7
Avg.		52.5	59.0	28.6	41.9	52.9	72.5	60.4
R-Squared		0.86	0.90	0.91	0.78	0.77	0.86	0.60

Table 39. Wheat: Yield and other characteristics of varieties evaluated at six locations for two years (1995-96).

Brand/Variety		Yield	Date Headed	Date Mature	Plant Ht.	Bushel Weight
		Bu/A			In.	Lb/Bu.
KY	Verne	57	5-4	6-8	37	54.9
Pioneer	2580	57	5-1	6-6	31	52.6
Pioneer	2684	57	4-30	6-7	31	55.5
AgriPro	Shiloh	56	5-4	6-8	32	53.9
AgriPro	Clemens	56	5-5	6-9	36	54.9
N.K. Coker	9803	55	5-1	6-7	30	56.1
FFR	555	55	5-3	6-9	32	53.5
VA	Madison	55	4-30	6-7	32	53.3
KY American Patriot		55	5-2	6-8	34	53.4
Terral	TVX 8555	55	5-5	6-8	30	53.7
OH	Glory	55	5-4	6-8	32	55.1
Pioneer	2628	55	5-3	6-7	32	54.3
AgriPro	Hickory	54	5-1	6-7	33	53.7
OH	Freedom	53	5-5	6-10	34	52.3
N.K. Coker	9543	53	5-1	6-6	30	55.5
VA	Jackson	53	5-4	6-8	32	53.8
Pioneer	2643	51	5-3	6-9	28	54.3
Terral	TVX 8825	51	5-5	6-12	34	54.6
FFR	525	51	5-3	6-9	33	54.7
N.K. Coker	9474	50	5-2	6-7	31	56.1
VA	Wakefield	49	5-6	6-10	35	53.0
GA	Dozier	49	5-4	6-7	30	54.7
RSI	Trical 498	48	4-27	7-10	37	46.2
GA	Stuckey	48	4-30	7-6	29	53.5
GA	Morey	38	5-1	6-9	30	51.5

Table 40. Wheat: Yield of varieties evaluated at five locations for three years (1994-96).

Brand/Variety	Avg. Yield	Knoxville	Springfield	Spring Hill	Milan	Martin
-----Bushels per acre-----						
KY Verne	65	63	59	60	77	68
Pioneer 2580	65	58	59	56	81	70
Pioneer 2684	64	61	54	55	83	69
FFR 555	64	61	57	59	75	67
Pioneer 2628	64	56	57	59	77	68
VA Madison	63	58	55	59	78	66
VA Jackson	63	62	55	54	73	70
AgriPro Hickory	63	63	52	54	76	68
N.K. Coker 9543	62	58	55	52	72	71
OH Freedom	61	58	59	51	72	68
N.K. Coker 9803	61	56	58	53	76	63
VA Wakefield	60	55	54	50	77	65
FFR 525	60	60	50	52	71	66
Terral TVX 8825	60	53	59	51	70	64
Pioneer 2643	59	59	53	50	76	60
N.K. Coker 9474	59	53	46	56	72	66
L.S.D (.05)	2.9	4.7	6.5	6.0	6.1	7.0
C.V. %	12.9	9.9	14.5	13.6	10.0	13.0
Avg.	62.1	58.3	55.2	54.6	75.0	66.8
R-Squared	0.80	0.85	0.74	0.90	0.68	0.65

Table 41. Wheat: Yield and other characteristics of varieties evaluated at five locations for three years (1994-96).

Brand/Variety		Avg. Yield	Date Headed	Date Mature	Plant Ht.	Bushel Weight
		Bu/A			In.	Lb/Bu.
KY	Verne	65	5-2	6-7	38	55.3
Pioneer	2580	65	4-29	6-5	32	53.3
Pioneer	2684	64	4-28	6-6	32	56.4
FFR	555	64	5-2	6-8	33	54.2
Pioneer	2628	64	5-1	6-6	32	54.4
VA	Madison	63	4-28	6-5	33	54.3
VA	Jackson	63	5-3	6-7	33	55.3
AgriPro	Hickory	63	4-29	6-5	34	54.7
N.K. Coker	9543	62	4-30	6-6	31	56.0
OH	Freedom	61	5-3	6-9	35	52.9
N.K. Coker	9803	61	4-29	6-6	31	56.7
VA	Wakefield	60	5-4	6-8	36	54.6
FFR	525	60	5-1	6-6	34	56.0
Terral	TVX 8825	60	5-4	6-10	35	54.7
Pioneer	2643	59	4-30	6-8	28	55.1
N.K. Coker	9474	59	4-30	6-6	32	56.7

Table 42. Barley: Yield and other characteristics of varieties evaluated at Springfield in 1996.

Brand/Variety		Yield	Date Headed	Plant Ht.	Stand
		Bu/A		In.	%
GA	Luttrell	97	4-27	31	90
VA	Nomini	96	4-26	31	90
VA	Starling	85	4-29	35	80
VA	Pamunkey	81	4-28	30	80
VA	Callao	73	4-28	28	80
L.S.D. (.05)		13.2			
C.V.%		9.9			
Avg.		86.5			
R-Squared		0.66			

Table 43. Barley: Yield and other characteristics of varieties evaluated at Knoxville in 1996.

Brand/Variety		Yield	Date Headed	Date Mature	Plant Height	Bushel Weight
		BU/A			In.	%
VA	Starling	97	5-6	6-8	36	41.5
VA	Callao	87	5-7	6-9	25	45.9
VA	Nomini	80	5-7	6-12	35	43.2
GA	Luttrell	73	5-4	6-13	33	42.7
VA	Pamunkey	70	5-5	6-9	33	44.9
L.S.D. (.05)		10.0				
C.V. %		8.1				
Avg.		81.4				
R-squared		0.80				

Table 44. Barley: Yield and other characteristics of varieties evaluated at Spring Hill in 1996.

Brand/Variety		Yield	Date Headed	Date Mature	Plant Height	Stand
		Bu/A			In	%
VA	Callao	76	4-27	5-27	24	70
GA	Luttrell	69	4-28	6-2	30	70
VA	Pamunkey	63	4-28	5-28	28	60
VA	Nomini	59	4-29	6-2	33	60
VA	Starling	48	4-30	5-30	30	80
L.S.D. (.05)		11.2				
C.V. %		11.5				
Avg.		63.2				
R-Squared		0.78				

Table 45. Barley: Yield of barley varieties evaluated at four locations in 1996.

Brand/Variety		Avg. Yield	Knoxville	Greeneville	Springfield	Spring Hill
		-----BU/A-----				
VA	Starling	69	97	45	85	48
VA	Nomini	69	80	40	96	59
GA	Luttrell	68	73	31	97	69
VA	Callao	67	87	33	73	76
VA	Pamunkey	59	70	22	81	63
L.S.D. (.05)		5.7	10.1	12.8	13.3	11.2
C.V. %		11.9	8.1	24.3	10.0	11.5
Avg.		66.3	81.4	34.2	86.5	63.2
R-Squared		0.95	0.80	0.64	0.66	0.78

Table 46. Barley: Yield and other characteristics of varieties evaluated at Greeneville in 1996.

Brand/Variety		Yield	Date Headed	Date Mature	Plant Height
		Bu/a			In.
VA	Starling	45	4-30	6-12	33
VA	Nomini	40	4-30	6-11	33
VA	Callao	33	4-25	6-10	26
GA	Luttrell	33	4-30	6-13	32
VA	Pamunkey	28	4-30	6-11	32
L.S.D. (.05)		9.0			
C.V.%		16.2			
Avg.		35.7			
R-Squared		0.66			

Table 47. Spring Oats: Yield of spring oat varieties evaluated at Knoxville and Springfield in 1996.

Brand/Variety		Avg. Yield	Knoxville		Springfield
			-----Bu/A-----		
WI	Prairie	113	106	121	
WI	Horicon	108	99	117	
IN	Brawn	106	107	105	
IN	Ogle	105	97	113	
WI	Dane	105	99	111	
IN	Don	104	96	113	
WI	Belle	98	89	106	
WI	Gem	87	75	100	
WI	Bay	85	68	103	
WI	Centennial	65	47	82	
L.S.D. (.05)		7.3	7.7	11.0	
C.V. %		7.3	6.0	7.1	
Avg.		97.6	88.2	107.0	
R-Square		0.95	0.95	0.76	

Table 48. Yield and other characteristics of spring oats evaluated at two locations in 1996.

Brand/Variety		Date Yield	Date Headed	Plant Mature	Height	Bushel Weight
		Bu/A			In.	Lb/Bu.
WI	Prairie	113	5-28	6-28	34	31.7
WI	Horicon	108	5-25	6-27	36	29.4
IN	Brawn	106	5-28	6-27	31	30.7
IN	Ogle	105	5-26	6-27	35	30.1
WI	Dane	105	5-22	6-27	33	30.0
In	Don	104	5-24	6-28	32	33.3
WI	Belle	98	5-30	6-30	38	31.4
WI	Gem	87	5-29	6-30	35	29.8
WI	Bay	85	6-1	6-30	32	29.8
WI	Centennial	65	5-26	6-30	35	23.4
L.S.D. (.05)		7.3				
C.V. %		7.3				
Avg.		97.6				
R-Square		0.95				

Table 49. Rye and Triticale: Yield and other characteristics of varieties evaluated at Knoxville in 1996.

Brand/Variety	Avg. Yield	Date Headed	Date Mature	Plant Height	Lodging	Bushel Weight
	Bu/A			In.	¹ Rating	Lb/Bu
Stonewall Graze Master	67	4-30	6-24	55	1	53.8
TFC 20-20	65	4-28	6-21	57	5	54.1
TFC Winter Magic	61	4-30	6-21	55	1	53.5
TFC X-Rebel	59	4-29	6-20	56	6	54.1
TFC Volunteer Magic	57	4-28	6-18	56	6	53.8
TFC X Cannonball	52	4-30	6-18	56	5	55.1
Trical 2700	49	5-15	6-18	55	3	48.8
Trical 102	25	5-17	6-10	59	7	45.8
RSI L Exp. (Tricale)	19	5-18	6-20	41	1	42.6
L.S.D. (.05)	7.4					
C.V.%	10.1					
Avg.	50.6					
R-Squared	0.94					

¹Rating based on a scale of 0 to 10 with 10 being 100 % lodged.

Table 50. Wheat: Yield and other characteristics of two extra varieties evaluated at Knoxville in 1996¹.

Brand/Variety	Yield	Date Headed	Date Mature	Plant Ht.	Bushel Weight
	Bu/A			In.	Lb/Bu
VA Wakefield	55	5-15	6-13	34	55.3
MO Ernie	49	5-8	6-13	27	55.2
FFR Exp. 1401	46	5-9	6-12	30	55.3
L.S.D. (.05)	N.S.				
C.V.%	10.8				
Avg.	49.9				
R-Squared	0.74				

¹Ernie and FFR Exp. 1401 were not included in the regular variety trials because the entries arrived too late.

Early Maturing Soybeans (Maturity Group IV)

In 1996, forty-two early-maturing varieties were evaluated at the following five locations: Knoxville, Crossville, Springfield, Milan, and Ames Plantation. Commercial strains of maturity group IV were grown at Jackson only. The maturity of varieties in the early test ranged from late maturity group IV to the earlier maturity group III. The maturity group III and IV results are presented in Tables 51 through 56. HyPerformer AP 4880, Pioneer brand 9482 and Manokin produced higher yields than the mean of 51.7 bu/a.

TN Exp TN 92-73 and Dyna-Gro 3495 produced lower yields than the mean (Table 51).

The two-year yield and other characteristics are presented in Tables 53 and 54. Gutwein 7474, Deltapine DP 3478, Manokin, Northrup King S 48-14, Asgrow A 4922, Hartz H 4994, and FFR 514 produced higher yields than the check variety TN 4-86 (Table 53).

Three years data are shown in Tables 55 and 56. Deltapine DP 3478, Manokin, Hartz H 4994, Chesapeake, and Asgrow A 4715 yielded more than the check variety TN 4-86 (Table 55). Manokin and Hartz H 4994 were two of the later maturing varieties in this maturity group (Table 56).

Maturity Group V

The maturity group V varieties were evaluated at Knoxville, Spring Hill, Springfield, Martin, Milan and Ames Plantation.

Maturity group V trials consisted of 60 entries in 1996. These 60 varieties were evaluated in two rows instead of the standard four row plots. All other trials of maturity group IV and VI were evaluated using four row plots. All yields were adjusted to 13% moisture. At Milan all maturity groups were evaluated in plots 30 feet long and 7.5 inches row spacing.

The data for maturity group V are reported in Tables 57 through 62. The test at Greeneville was harvested late in 1996 and results will be reported later.

Asgrow A 5885, Deltapine DP 3571S, Asgrow A 5547, Asgrow A 5944, Asgrow A 5979, Pioneer brand 9584, Hutcheson, Asgrow A 5848, Dixie King 5475, Pioneer brand 9594, and Asgrow A 5843 produced higher yields than the mean of 54.6 bu/a (Table 57).

The two-year results for maturity group V are shown in Tables 59 and 60. Deltapine DP 3571S, Asgrow A 5547, Asgrow A 5979, Asgrow A 5885, Pioneer brand 9584, Hutcheson, Deltapine DP 3519S, and Asgrow A 5843 produced higher yields than the mean of 49.5 bu/a (Table 59).

Three-year results are shown in Tables 61 and 62. The leading varieties over this three year period were Asgrow A 5885, Asgrow A 5979, Asgrow A 5843, Hutcheson, Pioneer brand 9584, and Deltapine 415.

Maturity Group VI

Four late-maturing soybean varieties (Group VI) were grown at Knoxville, Spring Hill, Milan and Ames Plantation in 1996.

The late-maturing soybean data for 1996 are reported in Tables 63 and 64.

No two or three year data are presented for this maturity group due to the low number of varieties evaluated for three years.

Soybean Strains

Six maturity group IV were evaluated at Jackson in 1996 (Table 65). At Knoxville in 1996, four varieties were evaluated in a small test adjacent to the regular variety trials. The small test at Knoxville was due to some varieties arriving late and the regular state variety trials had been already planted in some cases (Table 66).

Table 51. Soybeans: Yield of varieties (Maturity Group IV) evaluated at five locations in 1996.

Brand	Variety	Avg. Yield	Knox-ville	Cross-ville	Spring-field	Milan	Ames Plantation
-----Bushels per acre-----							
HyPerformer	AP 4880	59	65	58	54	59	58
Pioneer	9482	58	53	57	63	66	51
PA	Manokin	57	60	50	55	63	59
Caverndale	CF 492	56	56	61	61	61	44
Deltapine	DP 3478	56	57	48	58	62	54
Caverndale	CF 461	55	53	56	59	60	50
Hartz	H 4994	55	51	51	52	61	60
Terral	TVX 4770	55	54	63	50	54	54
Gutwein	7474	55	62	55	52	49	56
Caverndale	CF 480 SCN	54	60	51	52	56	52
Northrup King	S 48-14	54	37	56	62	67	49
Dixie	478	54	55	50	61	62	44
Asgrow	A 4922	54	49	59	52	60	51
FFR	514	54	48	59	55	53	56
VA	Chesapeake	54	53	53	47	61	56
TN Exp.	TN 93-87	53	47	57	49	59	54
Terral	TV 4479	53	53	53	51	56	53
Northrup King	S 46-44	53	55	50	50	63	48
Delta King	4875	52	49	54	52	53	54
DeKalb	CX 478	52	45	62	47	61	47
Deltapine	DP 3456	52	50	51	51	59	49
TN	TN 4-94	52	51	52	51	50	57
Asgrow	A 4715	52	51	50	50	62	47
Delta King	4860	52	49	54	45	60	51
Pioneer	9481	51	56	45	53	54	49
Hornbeck	HBK 4600	51	50	46	54	60	47
TN Exp.	TN 93-88	51	43	49	54	66	46
Delsoy	4710	51	45	54	48	55	54
HyPerformer	HY 4540	51	43	52	49	63	49
DeKalb	CX 499 C	50	56	48	45	56	45
Terral	TV 4596	49	55	49	47	51	43
Gutwein	7439 C	49	47	51	51	48	46
Terral	TVX 4100 RR	48	37	54	48	54	47
Asgrow	A 4341	48	42	51	48	56	43
MO	Magellan	47	43	51	50	47	46
Hornbeck	HBK 49	47	38	49	40	56	53
TN	TN 4-86	47	51	49	47	48	42
TN Exp.	TN 91-55R	47	56	46	49	40	46

Table 51. Continued

Brand	Variety	Avg. Yield	Knox- ville	Cross- ville	Spring- field	Milan	Ames Plantation
MO	Mustang	47	47	45	47	49	46
MO	Saline	46	33	56	46	53	44
TN Exp.	TN 92-73	43	46	42	45	41	41
Dyna-Gro	3495	43	32	36	41	57	49
L.S.D. (.05)		5.2	11.3	9.0	9.9	14.2	7.5
C.V.%		16.1	16.3	12.3	13.9	18.0	10.8
Avg.		51.7	49.5	51.9	51.0	56.4	49.7
R-Square		0.44	0.58	0.49	0.44	0.40	0.70

Table 52. Soybeans: Yield and other characteristics of varieties (Maturity Group IV) evaluated at five locations in 1996.

Brand	Variety	Avg. Yield	Full Bloom	Matur- ed	Plant Ht.	Lodg- ed	¹ Flower	² Pubes- cence	Seed Moisture
		Bu/A	Date	Date	In.	%	Color	Color	%
HyPerformer	AP 4880	59	7-4	9-16	37	23	P	T	14.4
Pioneer	9482	58	7-4	9-18	34	16	W	T	13.6
PA	Manokin	57	7-15	9-22	34	43	W	T	14.2
Caverndale	CF 492	56	7-7	9-14	27	14	W	G	14.4
Deltapine	DP 3478	56	7-4	9-16	34	26	P	B	14.2
Caverndale	CF 461	55	7-4	9-16	37	24	W	T	14.4
Hartz	H 4994	55	7-16	9-20	34	52	W	B	14.7
Terral	TVX 4770	55	7-4	9-17	38	29	P	T	13.3
Gutwein	7474	55	7-4	9-17	35	17	P	T	14.2
Caverndale	CF 480 SCN	54	7-5	9-16	36	21	P	T	13.4
Northrup King	S 48-14	54	7-5	9-16	33	10	P	G	15.0
Dixie	478	54	7-8	9-18	38	24	P	G	14.6
Asgrow	A 4922	54	7-4	9-17	39	18	W	T	13.8
FFR	514	54	7-14	9-21	36	30	P	B	14.8
VA	Chesapeake	54	7-7	9-15	38	36	W	G	14.0
TN Exp.	TN 93-87	53	7-16	9-24	33	47	P	G	14.9
Terral	TV 4479	53	7-5	9-16	34	06	W	T	14.0
Northrup King	S 46-44	53	7-5	9-16	37	16	P	T	13.4
Delta King	4875	52	7-4	9-17	37	28	W	T	13.9
DeKalb	CX 478	52	7-4	9-15	36	16	W	T	14.0
Deltapine	DP 3456	52	7-4	9-13	33	33	W	T	14.2
TN	TN 4-94	52	7-5	9-22	42	26	P	G	14.8
Asgrow	A 4715	52	7-5	9-16	34	3	W	T	14.2
Delta King	4860	52	7-5	9-15	35	6	W	T	13.8
Pioneer	9481	51	7-4	9-14	36	6	W	T	14.1
Hornbeck	HBK 4600	51	7-4	9-17	34	4	W	T	14.5
TN Exp.	TN 93-88	51	7-15	9-22	32	34	P	T	14.5
Delsoy	4710	51	7-5	9-20	40	52	P	T	14.0
HyPerformer	HY 4540	51	7-4	9-14	33	4	W	T	14.7
DeKalb	CX 499 C	50	7-4	9-15	42	16	W	B	14.3
Terral	TV 4596	49	7-5	9-16	40	24	P	B	15.0
Gutwein	7439C	49	7-4	9-16	35	5	W	G	14.2
Terral	TVX 4100RR	48	7-4	9-15	34	4	P	B	14.1
Asgrow	A 4341	48	7-5	9-18	29	4	P	T	13.8
MO	Magellan	47	7-4	9-18	33	61	P	G	14.4
Hornbeck	HBK 49	47	7-16	9-28	47	63	W	G	15.0
TN	TN 4-86	47	7-4	9-14	40	27	P	T	15.1
TN Exp.	TN 91-55R	47	7-6	9-10	36	11	P	T	15.1
MO	Mustang	47	7-4	9-14	34	7	W	G	14.0
MO	Saline	46	7-3	9-7	34	19	W	G	16.2
TN	TN 92-73	43	7-6	9-18	40	14	P	G	16.1
Dyna-Gro	3495	43	7-15	9-29	44	54	W	G	15.2

¹Flower color: W=white and P=Purple.

²Pubescence color: G=Gray, T=tawney and B=Brown.

Table 53. Soybeans: Yield of varieties (Maturity Group IV) evaluated at five locations for two years (1995-96).

Brand	Variety	Avg. Yield	Knox-ville	Cross-ville	Spring-field	Ames	
						Plantation	Milan
-----Bushels per acre-----							
Gutwein	7474	48	51	45	39	57	51
Deltapine	DP 3478	48	49	39	41	54	57
PA	Manokin	47	54	35	38	56	54
Northrup King	S 48-14	47	35	44	43	54	61
Asgrow	A 4922	46	45	45	37	52	52
Hartz	H 4994	46	47	39	37	56	53
FFR	514	46	46	42	38	54	51
Terral	TV 4479	45	44	42	40	53	48
VA	Chesapeake	45	44	41	36	55	50
Asgrow	A 4715	45	44	40	38	50	53
Deltapine	DP 3456	44	44	41	37	49	51
Northrup King	S 46-44	44	45	37	38	48	51
TN	TN 4-94	43	40	39	37	52	45
Pioneer	9481	42	43	36	35	48	48
TN Exp.	TN 91-55R	42	47	35	36	48	43
Terral	TV 4596	42	45	37	35	44	48
TN	TN 4-86	41	44	37	34	43	45
MO	Saline	40	27	43	35	48	45
L.S.D. (.05)		3.8	6.9	5.8	N.S.	4.5	7.6
C.V. %		19.6	15.8	14.7	15.6	9.0	15.2
Avg.		44.6	44.0	39.8	37.5	51.1	50.3
R-Square		0.63	0.73	0.86	0.90	0.69	0.65

Table 54. Yield and other characteristics of varieties (Maturity Group IV) evaluated At five locations for two years (1995-96).

Brand	Variety	Avg. Yield	Full Bloom	Matur- ed	Plant Ht.	Lod- ged	¹ Pubes- Flower	² Seed cence	Moisture
		BU/A	Date	Date	In.	%	Color	Color	%
Gutwein	7474	48	7-2	9-18	34	9	P	T	13.7
Deltapine	DP 3478	48	7-3	9-17	34	14	P	T	13.9
PA	Manokin	47	7-11	9-23	32	35	W	T	14.2
Northrup King	S 48-14	47	7-2	9-17	32	5	P	G	14.1
Asgrow	A 4922	46	7-2	9-18	36	9	W	T	13.7
Hartz	H 4994	46	7-12	9-22	33	38	W	B	14.4
FFR	514	46	7-10	9-21	34	18	P	B	14.5
Terral	TV 4479	45	7-3	9-17	33	3	W	T	13.7
VA	Chesapeake	45	7-4	9-17	35	27	W	G	13.6
Asgrow	A 4715	45	7-2	9-16	33	02	W	T	13.8
Deltapine	DP 3456	44	7-1	9-14	32	19	W	T	14.1
Northrup King	S 46-44	44	7-2	9-16	35	9	P	T	13.3
TN	TN 4-94	43	7-3	9-22	40	13	P	G	14.4
Pioneer	9481	42	7-3	9-15	36	4	W	T	14.4
TN Exp.	TN 91-55R	42	7-4	9-15	34	6	P	T	14.7
Terral	TV 4596	42	7-3	9-15	38	12	P	B	14.3
TN	TN 4-86	41	7-2	9-14	38	16	P	T	14.4
MO	Saline	40	7-1	9-7	33	10	W	G	15.2

¹Flower color: W=white and P=purple.

²Pubescence color: G=Gray, T=tawny and B=brown.

Table 55. Soybeans: Yield of varieties (Maturity Group IV) evaluated at five locations for three years (1994-96).

Brand	Variety	Avg. Yield	Knox-ville	Cross-ville	Spring-field	Milan	Ames Plantation
-----Bushels per acre-----							
Deltapine	DP 3478	51	56	45	41	55	57
PA	Manokin	50	57	41	41	58	56
Hartz	H 4994	49	52	43	36	56	56
VA	Chesapeake	47	50	44	39	49	55
Asgrow	A 4715	47	50	43	38	55	50
Deltapine	DP 3456	46	51	44	36	49	51
Northrup King	S 46-44	46	52	41	37	51	47
TN Exp.	TN 91-55R	44	53	38	38	44	49
TN	TN 4-94	44	46	39	40	40	53
TN	TN 4-86	43	51	39	36	43	45
L.S.D (.05)		2.4	5.8	5.2	4.3	5.4	4.4
C.V.%		14.4	13.8	15.4	14.0	13.2	10.4
Avg.		41.7	51.7	41.7	38.3	49.9	51.8
R-Square		0.76	0.77	0.81	0.87	0.75	0.57

Table 56. Soybeans: Yield and other characteristics of varieties (Maturity Group IV) evaluated at five locations for three years (1994-96).

Brand	Variety	Avg. Yield	Full Bloom	Matur- ed	Plant Ht.	Lod- ged	Flower	¹ Pubes- cence	² Seed Moisture
		BU/A	Date	Date	In.	%	Color	Color	%
Deltapine	DP 3478	51	7-2	9-17	36	20	P	G	14
PA	Manokin	50	7-12	9-24	33	31	W	T	14
Hartz	H 4994	49	7-13	9-23	33	35	W	T	14
VA	Chesapeake	47	7-5	9-18	36	31	W	G	14
Asgrow	A 4715	47	7-3	9-16	34	1	W	T	14
Deltapine	DP 3456	46	7-1	9-13	33	24	W	T	14
Northrup King	S 46-44	46	7-2	9-16	37	15	P	T	13
TN Exp.	TN 91-55R	44	7-4	9-17	36	9	P	T	15
TN	TN 4-94	44	7-4	9-21	41	13	P	G	14
TN	TN 4-86	43	7-2	9-15	41	19	P	T	14

¹Flower color: W=white and P=purple.

²Pubescence color: G=Gray, T=tawny and B=Brown.

Table 57. Soybeans: Yield of varieties (Maturity Group V) evaluated at six locations in 1996.

Brand	Variety	Avg. Yield	Knox-ville	Spring Hill	Spring-field	Ames		
						Milan	Plantation	Martin
-----Bushels per acre-----								
Asgrow	A 5885	63	62	69	52	69	64	63
Deltapine	DP 3571 S	63	66	59	50	65	60	76
Asgrow	A 5547	61	59	61	48	67	67	66
Asgrow	A 5944	61	62	61	42	69	68	66
Asgrow	A 5979	61	69	60	56	64	62	55
Pioneer	9584	61	63	61	48	65	65	64
VA	Hutcheson	60	58	61	45	71	68	60
Asgrow	A 5848	60	53	63	49	61	65	69
Delta King	5475	59	69	63	55	65	54	48
Pioneer	9594	59	68	61	41	64	59	60
Asgrow	A 5843	59	42	67	45	71	63	65
FFR	545	58	58	58	49	72	61	53
ICI Exp.	6532 N	58	58	56	49	70	62	55
Gutwein	7530 C	58	59	55	47	71	59	56
Deltapine	415	57	54	55	57	61	62	55
Dixie	579	57	59	55	51	74	58	48
Deltapine	DP 3519 S	57	53	55	44	58	62	72
TN Exp.	TN 91 SS-33	57	56	60	42	65	63	56
TN	TN 5-95	57	56	55	48	56	60	66
Terral	TV 5797	57	46	55	55	62	63	59
HyPerformer	HY 574	57	59	59	48	58	59	57
Hartz	H 5218	57	55	61	49	58	60	57
FFR	563	57	53	62	51	57	56	61
TN Exp.	TN 92-249	56	52	59	38	68	61	57
Terral	TV 5893	56	56	57	43	61	53	63
NC	Graham	55	51	60	46	66	61	48
N. K. ¹	S 57-11	55	49	59	49	56	58	61
FFR	553	55	51	59	52	54	66	49
Dixie	544	55	59	57	41	59	56	58
Pioneer	9552	55	42	53	49	61	55	67
TN Exp.	T N 92-198	55	58	55	41	66	56	52
NC	Clifford	55	58	57	48	65	64	36
N.K. ¹	S 52-25	54	53	56	43	55	64	56
Hornbeck	HBK 54	54	66	56	47	62	49	47
Deltapine	DP 3588	54	50	55	51	65	57	47
Dyna-Gro	3576	53	42	52	39	74	60	53
FFR	542	53	43	61	49	54	54	56
Hartz	HX 525419	53	37	60	51	59	50	59

Table 57. Continued

Brand	Variety	Avg. Yield	Knox-ville	Spring Hill	Spring-field	Milan	Ames Plantation	Martin
TN Exp.	TN 93-102	52	47	60	35	68	56	49
TN Exp.	TN 93-99	52	50	61	36	62	58	47
NC	Holladay	52	55	52	46	64	51	46
	Wicomico	52	52	51	54	54	56	48
Delta King	5850	52	49	58	42	61	55	49
Asgrow	A 5403	52	24	56	47	57	64	65
VA	Accomac	52	31	56	54	63	59	49
VA	Essex	51	55	50	38	66	55	40
Hornbeck	HBK 58	51	39	56	46	59	52	52
TN Exp.	TN 93-74	51	54	52	41	59	54	43
Delsoy	5500	50	41	57	36	53	52	63
TN Exp. TN	93-258	50	50	51	39	59	57	46
Riverside	RVS 77	50	40	50	37	61	55	56
Riverside	RVS 499	50	48	54	49	39	54	55
Riverside	Robin 5	50	57	57	41	59	55	29
TN Exp.	TN 92-228	49	59	58	43	39	59	39
Riverside	RVS 549	49	44	53	41	60	53	41
TN	TN 5-92	49	41	55	44	54	53	44
Riverside	RVS 529 I	48	24	51	41	58	56	59
TN Exp.	TN 93-163	47	49	53	34	41	51	55
DeKalb	CX 510 C	47	32	49	47	47	55	53
MS Exp.	D91-9391	46	37	43	36	60	47	55
L.S.D. (.05)		4.1	8.5	7.7	9.4	11.5	8.0	10.4
C.V. %		13.2	11.8	9.8	14.6	13.5	9.9	13.7
Avg.		54.6	54.0	56.8	45.6	61.0	58.2	54.7
R-Square		0.67	0.82	0.50	0.53	0.53	0.54	0.67

¹N.K. = Northrup King.

Table 58. Soybeans: Yield and other characteristics of varieties (Maturity Group V) evaluated at six locations in 1996.

Brand	Variety	Avg Yield	Full Bloom	Matur- ed	Plant Ht.	Lodg- ed	¹ Flower	² Pubes- cence	Seed Moisture
		BU/A	Date	Date	In.	%	Color	Color	%
Asgrow	A 5885	63	7-24	10-4	37	32	W	T	12.3
Deltapine	DP 3571 S	63	7-21	10-6	41	28	P	G	12.4
Asgrow	A 5547	61	7-23	10-3	34	33	W	G	12.6
Asgrow	A 5944	61	7-24	10-9	37	17	W	G	13.3
Asgrow	A 5979	61	7-24	10-6	34	25	W	G	12.6
Pioneer	9584	61	7-21	10-4	35	19	W	T	12.7
VA	Hutcheson	60	7-24	10-2	34	23	W	G	13.0
Asgrow	A 5848	60	7-24	10-9	36	09	W	G	12.7
Delta King	5475	59	7-21	10-4	33	22	W	B	12.3
Pioneer	9594	59	7-24	10-8	36	26	W	G	13.0
Asgrow	A 5843	59	7-23	10-6	37	07	W	G	12.9
FFR	545	58	7-22	10-1	33	20	P	B	12.9
ICI Exp.	6532 N	58	7-18	10-1	30	17	M(P/W)	T	12.3
Gutwein	7530C	58	7-18	10-2	30	18	M(P/W)	T	12.3
Deltapine	415	57	7-22	10-1	34	15	P	G	13.1
Dixie	579	57	7-20	10-6	33	11	P	B	12.4
Deltapine	DP 3519S	57	7-22	9-3	33	22	P	G	12.9
TN Exp.	TN 91 SS-33	57	7-25	10-3	34	23	W	G	12.6
TN	TN 5-95	57	7-21	9-29	35	13	P	T	12.6
Terral	TV 5797	57	7-23	10-6	36	20	W	G	12.9
HyPerformer	HY 574	57	7-24	10-5	36	44	P	T	12.6
Hartz	H 5218	57	7-22	10-1	35	22	P	B	12.7
FFR	563	57	7-22	10-4	36	15	P	G	12.9
TN Exp.	TN 92-249	56	7-25	10-3	33	25	W	G	12.7
Terral	TV 5893	56	7-25	10-7	36	45	P	T	13.2
NC	Graham	55	7-21	9-29	33	21	P	G	12.3
N.K. ³	S 57-11	55	7-24	10-8	35	26	P	T	13.0
FFR	553	55	7-21	9-30	33	13	P	B	12.8
Dixie	544	55	7-21	9-29	33	19	P	B	12.3
Pioneer	9552	55	7-23	9-29	34	13	P	G	12.8
TN Exp.	TN 92-198	55	7-21	9-28	30	17	W	G	12.4
NC	Clifford	55	7-21	9-29	33	29	P	T	12.5
N.K. ³	S 52-25	54	7-20	9-28	31	14	W	T	12.7
Hornbeck	HBK 54	54	7-22	10-6	32	20	W	G	13.3
Deltapine	DP 3588	54	7-26	10-8	42	41	P	T	12.9
Dyna-Gro	3576	53	7-23	10-4	32	42	W	G	13.0
FFR	542	53	7-21	9-30	34	13	P	G	13.3
Hartz	HX 525419	53	7-31	10-20	35	57	P	B	13.3

Table 58. Continued

Brand	Variety	Avg Yield	Full Bloom	Matur- ed	Plant Ht.	Lodg- ed	¹ Flower	² Pubes- cence	Seed Moisture
TN Exp.	TN 93-102	52	7-25	10-1	32	24	W	G	12.7
TN Exp.	TN 93-99	52	7-25	10-1	33	22	W	G	12.6
NC	Holladay	52	7-20	9-27	27	17	P	G	13.1
MD	Wicomico	52	7-19	9-30	32	11	P	T	12.1
Delta King	5850	52	7-23	10-2	33	29	W	B	13.2
Asgrow	A 5403	52	7-22	9-29	35	14	P	G	13.1
VA	Accomac	52	7-22	10-3	38	21	P	T	12.6
VA	Essex	51	7-19	9-28	29	17	P	G	12.7
Hornbeck	HBK 58	51	7-23	10-6	34	20	W	G	13.0
TN Exp.	Tn 93-74	51	7-20	9-30	29	19	P	G	12.4
Delsoy	5500	50	7-24	10-4	34	26	W	T	12.6
TN Exp.	TN 93-258	50	7-21	10-4	32	25	P	G	12.5
Riverside	RVS 77	50	7-24	10-8	35	37	W	T	13.0
Riverside	RVS 499	50	7-21	9-28	47	34	P	G	13.0
Riverside	Robin 5	50	7-25	10-6	32	25	W	G	13.5
TN Exp.	TN 92-228	49	7-24	10-4	32	19	P	G	12.5
Riverside	RVS 549	49	7-23	10-2	33	43	P	T	12.8
TN	TN 5-92	49	7-24	10-3	36	33	W	G	12.4
Riverside	RVS 529 I	48	7-22	9-28	47	46	W	G	13.0
TN Exp.	TN 93-163	47	7-25	10-5	35	19	W	G	12.9
DeKalb	CX 510 C	47	7-18	9-27	28	00	W	T	13.0
MS Exp.	D91-9391	46	7-25	10-4	37	79	W	G	13.2

¹Flower color:W=white,P=pruple and M=W/P.

²Pubescence color:G=gray, T=tawny and B=Brown.

³N.K.=Northrup King.

Table 59. Soybeans: Yield of varieties (Maturity Group V) evaluated at six locations for two years (1995-96).

Brand	Variety	Avg. Yield	Knox-ville	Spring Hill	Spring-field	Ames		
						Plantation	Milan	Martin
-----Bushels per acre-----								
Deltapine	DP 3571 S	55	50	55	36	58	62	68
Asgrow	A 5547	54	50	57	32	61	61	64
Asgrow	A 5979	54	54	52	38	61	61	57
Asgrow	A 5885	54	48	59	36	61	61	58
Pioneer	9584	53	50	52	34	62	63	60
VA	Hutcheson	53	49	54	30	62	64	57
Deltapine	DP 3519 S	53	44	54	32	60	58	68
Asgrow	A 5843	53	39	58	31	58	65	65
Terral	TV 5797	52	41	52	38	61	58	59
TN EXP	TN 91 SS-33	51	46	53	28	58	62	59
FFR	563	51	47	56	35	53	55	59
TN Exp.	TN 92-249	51	46	54	29	58	63	54
Deltapine	415	51	46	51	36	57	59	56
Northrup King	S 57-11	50	45	52	33	54	54	61
HyPerformer	HY 574	50	46	51	32	57	54	57
TN	TN 5-95	49	44	51	32	55	55	60
FFR	553	49	46	52	34	61	53	50
Asgrow	A 5403	49	31	55	31	60	57	62
NC	Holladay	49	45	52	32	55	62	48
Deltapine	DP 3588	49	45	50	35	53	61	50
Hartz	H 5218	49	48	55	33	54	54	47
FFR	542	49	40	55	34	50	55	57
NC	Clifford	48	41	49	34	63	62	41
Northrup King	S 52-25	48	44	53	30	59	49	55
TN Exp.	TN 92-198	48	46	49	30	53	60	50
Riverside	RVS 499	46	43	50	34	51	43	52
VA	Accomac	46	31	49	35	55	58	45
TN Exp.	TN 92-228	45	49	54	31	52	47	40
VA	Essex	45	43	47	27	53	59	41
Riverside	RVS 549	45	41	49	28	51	57	43
TN	TN 5-92	43	36	51	30	51	49	43
Riverside	RVS 529 I	43	27	47	25	56	51	51
L.S.D. (.05)		3.3	6.0	5.2	4.9	6.0	6.0	7.4
C.V. %		16.7	13.8	10.1	15.3	10.7	10.6	13.8
Avg.		49.5	43.9	52.4	32.3	56.7	57.2	54.3
R-Square		0.71	0.82	0.68	0.93	0.55	0.64	0.64

Table 60. Soybeans: Yield and other characteristics of varieties (maturity Group V) evaluated at six locations for two years (1995-96)

Brand	Variety	Avg. Yield	Full Bloom	Matur- ed	Plant Ht.	Lodg- ed	¹ Pubes- cence		Seed ² Moisture
							Color	Color	
		BU/A	Date	Date	In.	%			%
Deltapine	DP 3571 S	55	7-18	10-2	40	18	P	G	12.2
Asgrow	A 5547	54	7-19	9-30	34	22	W	G	12.5
Asgrow	A 5979	54	7-21	10-3	36	19	W	G	12.6
Asgrow	A 5885	54	7-21	10-2	37	20	W	T	12.1
Pioneer	9584	53	7-19	10-2	35	13	W	T	12.6
VA	Hutcheson	53	7-21	9-30	34	15	W	G	12.9
Deltapine	DP 3519 S	53	7-19	9-27	34	15	P	G	12.8
Asgrow	A 5843	53	7-20	10-4	37	06	W	G	12.7
Terral	TV 5797	52	7-20	10-3	37	15	W	G	12.9
TN Exp.	TN 91 SS-33	51	7-22	10-2	34	15	W	G	12.6
FFR	563	51	7-20	10-2	36	10	P	G	12.8
TN Exp.	TN 92-249	51	7-22	10-2	33	16	W	G	12.5
Deltapine	415	51	7-19	9-29	35	12	P	G	12.8
Northrup King S	57-11	50	7-23	10-1	36	17	P	T	12.7
HyPerformer	HY 574	50	7-22	10-3	37	30	P	T	12.5
TN	TN 5-95	49	7-18	9-27	35	09	P	T	12.6
FFR	553	49	7-18	9-29	33	11	P	B	12.7
Asgrow	A 5403	49	7-20	9-27	35	09	P	G	12.6
NC	Holladay	49	7-17	9-26	29	13	P	G	12.9
Deltapine	DP 3588	49	7-23	9-26	43	26	P	T	13.9
Hartz	H 5218	49	7-19	9-29	35	16	P	B	12.6
FFR	542	49	7-18	9-29	35	09	P	G	12.9
NC	Clifford	48	7-18	9-28	32	18	P	T	12.5
Northrup King S	52-25	48	7-17	9-25	32	10	W	T	12.2
TN Exp.	TN 92-198	48	7-19	9-29	31	11	W	G	12.5
Riverside	RVS 499	46	7-17	9-25	45	22	P	G	12.7
VA	Accomac	46	7-19	9-30	37	18	P	T	12.5
TN Exp.	TN 92-228	45	7-19	10-1	31	13	P	G	12.3
VA	Essex	45	7-16	9-27	30	13	P	G	12.8
Riverside	RVS 549	45	7-20	10-1	33	29	P	T	12.5
TN	TN 5-92	43	7-22	10-1	37	25	W	G	12.4
Riverside	RVS 529 I	43	7-18	9-26	46	31	W	G	12.6

¹Flower color: W=white, P=Purple and M=W/P.

²Pubescence color: G=gray, T=tawny and B=brown.

Table 61. Soybeans: Yield of varieties (Maturity Group V) evaluated in 17 environments for three years (1994-96).

Brand	Variety	Avg. Yield	Knox-ville	Greene-ville	Spring Hill	Spring-field	Ames ¹		
							Plan.	Milan	Martin
		-----Number of environments (Years)-----							
		17	3	1	3	3	2	3	2
		-----Bushels per acre-----							
Asgrow	A 5885	56	57	72	56	40	61	62	58
Asgrow	A 5979	55	60	59	50	40	61	63	57
Asgrow	A 5843	55	45	78	55	35	58	67	65
VA	Hutcheson	55	54	75	49	35	62	66	57
Pioneer	9584	53	52	61	47	36	62	62	60
Deltapine	415	52	48	64	48	38	57	63	56
FFR	563	51	46	67	53	36	53	59	59
Asgrow	A 5403	51	37	71	52	35	60	60	62
FFR	553	51	52	63	48	36	61	57	50
NC	Holladay	51	51	69	47	36	55	61	48
NC	Clifford	51	51	62	44	38	63	64	41
N. K. ²	S 57-11	51	48	55	51	36	54	56	61
Hartz	H 5218	50	51	57	51	36	54	59	47
HyPerformer	HY 574	50	50	63	47	34	57	55	57
Deltapine	DP 3588	50	48	61	47	37	53	63	50
N.K. ²	S 52-25	49	46	55	50	34	59	55	55
FFR	542	49	41	64	50	36	50	58	57
VA	Essex	47	48	62	44	31	53	61	41
TN	TN 5-92	44	40	51	48	33	51	50	43
L.S.D. (.05)		2.2	5.8	9.8	4.2	3.7	6.4	7.2	4.7
C.V. %		13.0	14.7	10.9	10.6	12.7	11.4	13.5	9.8
Avg.		51.0	48.8	63.5	49.3	36.0	57.1	53.8	60.0
R-Square		0.80	0.79	0.63	0.77	0.92	0.52	0.96	0.65

¹Ames Plan. - Ames Plantation

²N.K. - Northrup King

Table 62. Soybeans: Yield and other characteristics of varieties (Maturity Group V) evaluated in 17 environments for three years (1994-96).

Brand	Variety	Avg. Yield	Full Bloom	Matur- ed	Plant Ht.	Lodg- ed	Flower	¹ Pubes- cence	Seed ² Moisture
		BU/A	Date	Date	In.	%	Color	Color	
Asgrow	A 5885	56	7-26	10-2	37	21	W	T	12
Asgrow	A 5979	55	7-20	10-4	36	20	W	G	13
Asgrow	A 5843	55	7-18	10-3	37	07	W	G	13
VA	Hutcheson	55	7-19	10-1	34	18	W	G	13
Pioneer	9584	53	7-17	10-3	36	21	W	T	13
Deltapine	415	52	7-18	9-30	36	16	P	G	13
FFR	563	51	7-19	10-3	36	09	P	G	13
Asgrow	A 5403	51	7-18	9-28	35	11	P	G	13
FFR	553	51	7-17	9-29	34	12	P	B	13
NC	Holladay	51	7-15	9-26	29	18	P	G	13
NC	Clifford	51	7-16	9-28	33	24	P	T	13
N.K. ³	S 57-11	51	7-21	10-1	36	17	P	T	13
Hartz	H 5218	50	7-18	9-30	36	23	P	B	13
HyPerformer	HY 574	50	7-21	10-4	37	35	P	T	13
Deltapine	DP 3588	50	7-22	10-6	44	25	P	T	14
N.K. ³	S 52-25	49	7-16	9-25	33	17	W	T	12
FFR	542	49	7-15	9-29	35	12	P	G	13
VA	Essex	47	7-14	9-26	30	12	P	G	13
TN	TN 5-92	44	7-21	10-1	38	26	W	G	12

¹Flower color: W=white and P=purple.

²Pubescence color: G-gray , T-tawny and -brown.

³N.K. = Northrup King

Table 63. Soybeans: Yield of varieties (Maturity Group VI) evaluated at four locations in 1996.

Brand	Variety	Avg. Yield	Knox-ville	Spring Hill	Milan	Ames Plantation
Northrup King	S 62-62	62	62	64	67	55
VA	Warsaw	61	58	61	71	55
TN Exp.	TN 93-142	60	65	60	62	53
TN	TN 6-90	52	43	64	55	45
L.S.D (.05)		6.1	11.2	N.S.	10.3	9.5
C.V. %		64.0	12.3	4.5	10.1	11.4
Avg.		13.5	56.8	62.4	63.7	52.0
R-square		0.80	0.76	0.61	0.65	0.87

Table 64. Soybeans: Yield and other characteristics of varieties (Maturity Group VI) evaluated at four locations in 1996.

Brand	Variety	Avg. Yield	Full Bloom	Matur- ed	Plant Ht.	Lodg- ed	¹ Pubes- Flower	cence	Grain ² Moisture
		BU/A	Date	Date	In.	%	Color	Color	%
N.K. ³	S 62-62	68	7-25	10-7	32	50	W	T	13.1
VA	Warsaw	67	7-29	10-12	35	34	P	G	13.1
TN Exp.	TN 93-142	65	7-28	10-10	36	10	W	G	13.7
TN	TN 6-90	56	7-31	10-15	36	10	W	T	13.8

¹Flower color:W=white and P=purple.

²Pubescence color:G=gray and T=tawny.

³N.K.= Northrup King.

Table 65. Soybeans: Yield and other characteristics of strains (Maturity group IV) evaluated at Jackson in 1996.

Brand	Strain	Yield	Matur- ed	Plant Ht.	Lodg- ed	Flower	Pubes- cence	Seed Moisture
		Bu/A	Date	In.	%	Color	Color	%
FFR	495	89	9-27	45	18	W	G	14.3
FFR	493	88	9-20	44	21	P	G	14.4
Deltapine	DP 3480	81	9-24	41	56	W	T	14.2
Deltapine	DP 3497	80	9-29	45	80	P	T	14.2
Hartz	HX 40009 RR	79	9-24	36	19	W	T	13.6
VA	Chesapeake	74	9-17	42	70	W	G	13.8

Table 66. Yield and other characteristics of varieties (Seed received late) evaluated at Knoxville in 1996.

Brand	Variety	Avg. Yield	Full Bloom	Matur- ed	Plant Ht.	Lodg- ed	Flower	Pubes- cence	Seed Moisture
Buckshot	55	61	7-10	¹	36	40	P	T	14.5
FFR	495	57	7-3	9-23	43	15	W	G	15.4
Pioneer	9551	57	7-8	9-15	34	00	W	T	14.6
FFR	493	49	7-3	9-15	42	40	P	G	15.0
L.S.D. (.05)		10.0							
C.V.%		11.1							
Avg.		56.0							
R-Square		0.63							

¹Failed to record maturity date.

Performance of grain sorghum varieties

Twenty six varieties were evaluated at Springfield and Milan in 1996. The test at Milan was planted no-till in killed wheat.

The data are shown in Table 67. The leading varieties in yield were FFR 351, FFR, 331, Pioneer brand 8305, FFR 321, HyPerformer AP 9850 and HyPerformer Cherokee. HyPerformer AP 9210 was among the lowest in yield.

Table 67. Grain Sorghum: Yield and other characteristics of varieties evaluated at Milan and Springfield in 1996.

Brand	Variety	Avg. Yield		Spring-Headed		Grain Type	Head Ext.	Plant Ht.	Grain Moisture
		Milan	Hill	Date	Rating ¹				
		Bushel per acre		Date		Rating ¹	In.	In.	%
FFR	351	111	129	94	7-15	2	6.2	61.4	16.9
FFR	331	110	120	100	7-16	3	5.7	59.4	16.6
Pioneer	8305	109	120	99	7-16	2	6.0	54.2	17.0
FFR	321	108	120	96	7-15	2	5.7	52.6	15.6
HyPerformer	AP 9850	108	124	92	7-18	3	5.5	56.0	16.6
HyPerformer	Cherokee	108	118	98	7-16	3	5.5	53.1	15.7
DeKalb	DK 40 Y	106	116	96	7-13	2	7.7	53.4	15.0
DeKalb	DK 45	106	113	98	7-15	1	8.5	54.2	15.8
DeKalb	DK 51	103	113	93	7-15	2	7.2	53.1	15.6
HyPerformer	1225 DR	103	116	89	7-15	2	7.0	53.6	14.6
Pioneer	X 5345	102	113	90	7-16	2	5.7	52.9	17.2
Deltapine	522 DR	101	109	93	7-15	2	6.2	51.9	15.1
HyPerformer	Wings	100	116	85	7-17	2	6.0	53.7	16.5
DeKalb	DK 44	100	111	90	7-15	1	8.8	50.4	15.4
Terral	TV 9421	100	108	93	7-16	2	6.5	51.7	15.4
HyPerformer	AP 2660	100	103	96	7-14	3	6.5	49.4	15.3
Northrup King	KS 735	99	109	89	7-16	2	6.5	54.9	15.4
Asgrow	A 570	99	107	91	7-17	2	8.3	57.1	14.6
Pioneer	8282	99	102	95	7-13	1	6.7	54.5	16.0
Terral	TV 9535	98	107	88	7-17	2	6.5	49.5	15.5
HyPerformer	Honcho	95	111	79	7-13	2	5.7	50.1	15.0
DeKalb	DK 55	95	102	88	7-20	1	7.5	57.7	18.9
DeKalb	DK 36	94	111	77	7-11	1	8.3	52.9	14.9
Deltapine	1552	94	105	83	7-14	1	6.5	56.5	16.3
Northrup King	KS 710	92	106	78	7-13	2	5.2	46.0	15.2
HyPerformer	AP 9210	88	95	82	7-11	2	7.2	49.4	14.5
L.S.D. (.05)		15.2	16.0	13.3					
C.V.%		15.2	10.2	10.5					
Avg.		101.1	111.6	90.5					
R-Square		0.56	0.41	0.84					

¹Rating based on a scale of 1 to 3 with 1=Tight 2=Medium and 3=Loose or open type head in compactness.

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